

**1979-1980
BULLETIN
CATALOGUE ISSUE**

DICKINSON COLLEGE

**CARLISLE
PENNSYLVANIA 17013**

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The principal accrediting agency for the College is the Middle States Association of Colleges and Secondary Schools. Other agencies accrediting or recognizing Dickinson are the University Senate of the United Methodist Church, the Pennsylvania Department of Education, the University of the State of New York, and The American Chemical Society.

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PREFACE

The Aims of Education at Dickinson

The educational philosophy of Dickinson College is written in the two hundred years of its rich and vital history. Students and teachers have come to this College over the years for a variety of reasons and have left to pursue a wide diversity of ends.

These can be summarized in three ideals: learning, liberty, virtue. Taken together they define the aims of the College to be a quest after knowledge for its own sake, but also as leading to involvement in practical affairs for the sake of social good and individual dignity.

This cluster of educational purposes was recognized by the "Representatives of the Freemen of the Commonwealth of Pennsylvania in General Assembly met" when they granted Dickinson College its charter in 1783. "The happiness and prosperity of every Community," they said, "depends much on the right education of the Youth who must succeed the Aged in the important offices of Society. The most exalted Nations have acquired their preeminence by the virtuous principles and liberal knowledge instilled into the minds of the rising generation." Therefore they proclaimed the creation of a college dedicated to "the instruction of Youth in the learned languages" and in the "useful arts, Sciences, and Literature."

Benjamin Rush expressed these same aims with 18th century elegance when, appealing to Charles Nisbet to come from Scotland as Dickinson's first president, he extolled the peculiar virtues of education in the frontier west of Susquehanna. "Human nature," said Rush, "here (unsubdued by the tyranny of European habits and customs) yields to reason, justice, and common sense. Come sir,

and spread the influence of science and religion among us. America seems destined by heaven to exhibit to the world the perfection which the mind of man is capable of receiving from the combined operations of liberty, learning, and the gospel upon it."

Learning for its own sake

Liberal knowledge, learning for its own sake and learning for the cultural enrichment it provides, is the oldest and most fundamental aim of Dickinson education. The first curriculum generously encompassed the fields of available scholarship: Rhetoric, Literature, Composition, Latin and Greek, Mathematics, Astronomy, Economics, Political Economy, and Moral Philosophy. Learning in this classical sense has been the bedrock supporting and eventually outlasting the various other purposes through which the College in ever changing ways has sought to be relevant to the times in which it found itself.

President John Durbin, in the 1830s, epitomized the aspirations of this ideal when he insisted that "the grand design of education is to excite, rather than to pretend to satisfy, an ardent thirst for information; and to enlarge the capacity of the mind, rather than to store it with knowledge, however useful."

The useful arts of liberty

In addition to learning is liberty. Dickinson College was chartered to secure the "happiness and prosperity" of the nation by educating the rising generation in the arts and knowledge which would enable them to succeed their elders in the "important offices of Society."

In accord with this goal, graduates of the College have distinguished themselves in state and national public office, in law, medicine, and the ministry. The College was embroiled in abolitionist controversies in the pre-Civil War decades, and in the 1880s it opened its doors for the first time to women and to blacks. A Department of Peace and Public Service existed for a time in the early part of the 20th century. More recently off-campus and intern programs, as well as a system of all-College governance, have offered students an opportunity to enrich their learning through involvement in its civic and pragmatic applications.

A statement from the 1960s encourages Dickinsonians to see their world as one in which they are able, "by virtue of the power gained through knowledge, to influence both their environment and the course of history," and thereby to use "their power in the service of the human community." In this way learning bears the social fruit of liberty.

Virtuous principles

Without "virtuous principles," however, knowledge and power are incomplete. The original charter, although insisting upon the autonomy of the College from all ecclesiastical control, acknowledged that the happiness and prosperity of Community can be accomplished only "under the direction and government of divine providence." Benjamin Rush's 1785 *Plan of Education* began by insisting that "the fear of the Lord is the beginning of wisdom, and should be the end & Object of all education."

During the 1830s, the Presbyterian propriety gave way to Methodist piety: the common sense realism of Charles Nisbet's required course in Moral Philosophy was supplanted by President Durbin's early morning chapels. In the years that followed, professors like John McClintock and

students such as Moncure Conway brought their high sense of ethical idealism to bear upon the confusions of the times, and are remembered with awe for the courage with which they lived their convictions.

Today, the College's religious and moral purposes have been enlarged to embrace the whole world of human values and commitments. The College seeks an atmosphere in which a diversity of beliefs can be encountered, their claims upon a person critically assessed, and the significance of each fully appreciated. The College aspires to provide a context in which each person might deepen an understanding of the values which are rooted in one's past and find their relevance to the social and personal issues of the day.

Pluralism of purposes

Dickinson College's pluralism of purposes is thus embodied in its past. Its educational philosophy has been to be a college of the liberal arts emphasizing classical learning and the disinterested pursuit of truth, a pre-professional college training a rising generation for public service and involvement in social change, a developmental college fostering individual maturation and the discovery of moral values.

The College has grown through two centuries as a result of the tensions and confusions bred by these many-sided and often contradictory aims. Most profoundly, therefore, its purpose lies in sustaining an educational environment in which these varied ends can thrive, each vying for the loyalties of students and faculty, each learning from the others, together furnishing the means by which "reason, justice, and common sense" might prevail and the nation's youth prepare themselves for the responsibilities and opportunities of adulthood.

GEORGE ALLAN
Dean of the College



I've learned to think.

DICKINSON COLLEGE



Dickinson College, coed, liberal arts, has a tradition of excellence in education. The current student body of 1610, about evenly divided between men and women, will join a long line of alumni stretching back to 1773.

Students are attracted to Dickinson by this heritage, by the College's setting among old trees, and, most importantly, by the faculty and the course of study. A low faculty-student ratio permits many small classes and seminars. There are, of course, some large classes, but about 48 percent of Dickinson's classes have fewer than 17 students.

The regular course of study, 34 courses, leads to the Bachelor of Arts or Bachelor of Science degrees. Students also develop their own programs through independent

study, honors work, or even a self-developed major, one which a student plans around a particular topic or idea. Special programs, such as the Nisbet Scholars, and off-campus programs all combine for a rich experience in the liberal arts. With this experience Dickinson graduates go into careers in the professions and business and to graduate schools.

Dickinson students are bright and friendly. They like fun, and they study hard. Most of them come from schools in the mid-Atlantic and northeastern states, although increasing numbers of applications are coming from the South and Mid-West. There are students on campus from around the world. About 30 percent receive grant assistance from the College.

*It's a nice place but
it's a lot of work.*

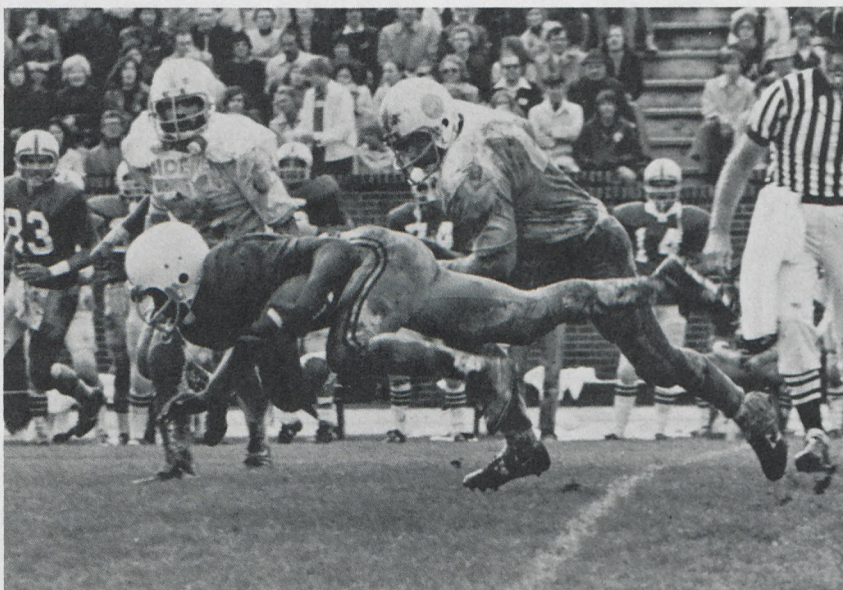
Student liberal arts interests on campus range through the College's three divisions — humanities, social sciences, natural sciences and mathematics. Dickinsonians are just as likely to play complicated word games or hold a discussion about what a professor said in class as to talk about dates or the latest sports event. Students are voting members in the College's governance system through membership on all-College committees and through the Student Senate.

To further indicate their range of interests: students operate a newspaper and a radio station, swim in the aquacade group, take part in intercollegiate and intramural sports, dance with the Israeli Folk Dance Troupe, and belong to the Belles Lettres or Union Philosophical societies both of which date from the 1780s. Approximately, 50 percent of the men join social fraternities; about 35 percent of the women join sororities.

The Spring Festival, an annual outburst of fun and creativity, coincides with the greening of the campus. Then and in the fall students lounge under the old elms to study, attend class, throw frisbies, or pet a dog. During the winter they conduct the Public Affairs Symposium. In 1979 the topic was "U.S. Foreign Policy—'The Times They Are A-Changin'.'" Student effort and planning brought to the campus in Carlisle nationally known people to talk for a few days about the global effects of American foreign policy.

A residential college has much to offer, both inside the classroom and outside it, which can contribute to the intellectual, cultural, physical, and social development of

*... there's more
flexibility.*





Faculty members are concerned about the students as individuals.

each student. A few years ago, Dickinson College combined the functions of the traditional dean of students office into a unique Educational Services Division that strives to integrate student life in support of the academic program.

The educational service concept brings together a staff responsible for housing, financial aid, counseling, health care, religious programs, cultural and special programs, and athletics. While members of the staff are specialists in their areas, all work individually with students and with groups to support and supplement the efforts of the faculty. The division of educational service is engaged in a wide range of activities that unite academic and social experiences, making the most of the opportunities for personal growth that exist at Dickinson.

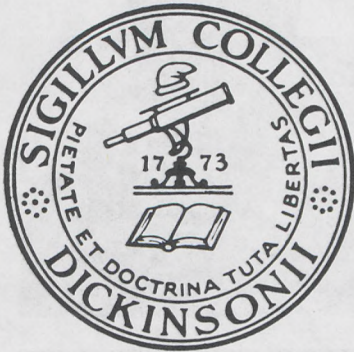
*I guess I am living
proof that an English
major can find
happiness and
success at the Harvard
Business School.*



1979-1980 BULLETIN

DICKINSON COLLEGE

Carlisle, Pennsylvania 17013



The distinctive Dickinson College seal was devised and recommended by John Dickinson and Dr. Benjamin Rush at a board of trustees meeting in April, 1784. Rush conceived the symbolic design: a liberty cap above a telescope, which is in turn above an open book; and Dickinson provided the motto:

Pietate et doctrina tuta libertas. One translation is "Liberty is made safe by piety and learning." A Rush letter to Dickinson in June, 1785 refers to the College as the "bulwark of liberty, religion and learning."

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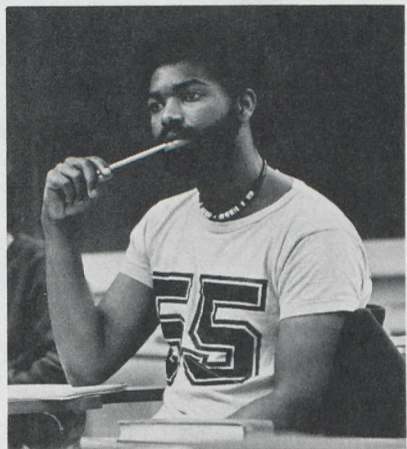
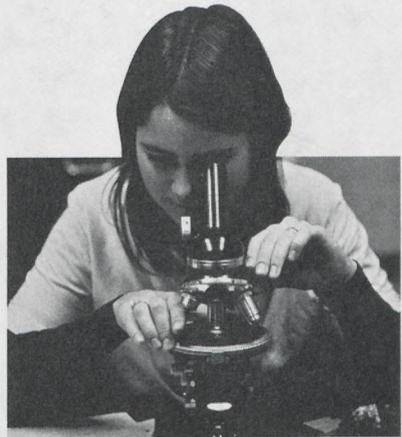
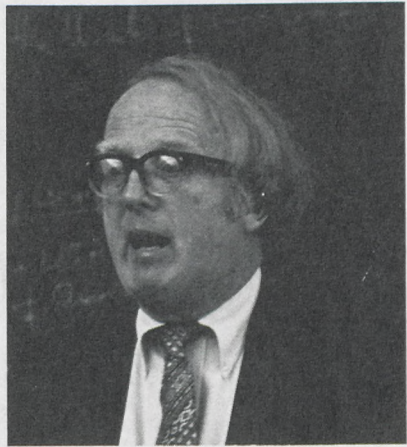
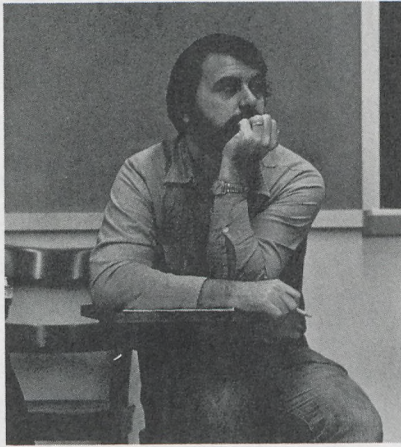


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THE ACADEMIC PROGRAM

Dickinson College offers the degree of Bachelor of Arts and the degree of Bachelor of Science. The Bachelor of Arts is available to all students; the Bachelor of Science can be earned only by students who major in biology, chemistry, physics, geology, and mathematics. Students who elect the Self-developed Major Program will receive the degree appropriate to their fields of study.

The selection of a program will depend upon the student's interests and vocational plans. Programs in engineering, premedical study, physics, and chemistry, for example, are the usual preparation for professional work in these fields. Students planning careers in law, business, or government service find majors in the humanities or social sciences of great value.

The purpose of a liberal education, however, is not primarily to provide vocational instruction, even though it may provide the best foundation for one's future vocation. Its purpose is to help students fulfill their responsibilities as sensitive persons and grow into cultivated and versatile individuals. Liberal education is concerned with cultural heritage, the world of thought, and the development of the full dimension of human potentiality.

It is necessary for most students to concern themselves with the problem of making a living. But this concern should not lead to early or narrow specialization. Undergraduates still have need of broadening the scope of human experience. Particular skills may afford access to routine employment, but positions of greater responsibility will be occupied by those who are equipped to think their way through new problems and to conceive of their functions in a larger context of time and space. Liberal education and vocational training are likely to be the joint products of a common process, and the courses offered here should be selected with this larger perspective in mind.

Normally, students during the first half of their college program satisfy some, if not all, of the distribution require-

ACADEMIC
PROGRAM

ments, choose their major field, and prepare for advanced work in these fields by taking the necessary prerequisites. A normal program consists of three to five courses each semester which students plan in consultation with their faculty advisers. Special advisers are available for preprofessional programs such as law, health professions, journalism, theology, education and engineering.

In addition to the normal course offerings Dickinson offers a rich program of independent study and research. A large part of a student's education can be spent in specially designed programs of self-initiated study. Students can also take some of their course work at another member college of the Central Pennsylvania Consortium: Franklin and Marshall, Gettysburg, or Wilson.

Finally, the College encourages study abroad both through its own summer and year-round programs and through cooperative efforts with other selected programs such as that of the Institute of European Studies.

Graduation Requirements

A student must pass 34 courses with a cumulative average of 2.00 and meet the applicable General, Distribution, and Concentration requirements. *Responsibility rests with the student for the election of such courses as will satisfy the requirements of the College for graduation.* A student must successfully complete a minimum of 17 courses on campus, the last 12 of which must be taken while the student is matriculated with an approved major field of concentration. In addition, at least six of the last eight or the last four courses immediately preceding graduation must be taken on campus. To be considered "on campus," a student must be registered for a numbered course at Dickinson and must be physically on the Dickinson campus for this course work.*

language department.

Students beginning a language at Dickinson must satisfactorily complete the 102 or 104 level course before receiving credit for the 101 course.

A student who is qualified by placement for enrollment at any given level, but who is unable to work effectively at that level, may (at any time within the first 30 calendar days of the semester) with the concurrence of the instructor and adviser drop back one level without penalty.

Students who have fulfilled the language requirement may then receive credit for a single semester of the elementary level of another language only by registering for that course as an independent study with the instructor.

GRADUATION REQUIREMENTS

Languages

A candidate for a degree is required to complete work in a foreign language, intermediate level. A degree candidate whose native tongue is not English may be relieved of this requirement by the dean of the College who shall notify the student of the fact in writing and send a copy of the notification to the registrar and to the student's adviser.

Any student entering a course in a foreign language which the student has studied for two or more years in a secondary school must take the appropriate College Entrance Examination Board Achievement Test. The student will be placed in the appropriate college course on the basis of the score achieved on this examination. The student may be excused from the language requirement on the basis of a sufficiently high placement score, with the permission of the appropriate

Physical Education

Satisfactory completion of three semesters (six units) of physical education is required. Transfer students with junior standing with no physical education credit need to take only two semesters (four units) of physical education. This requirement may also be met by one year of active military service. Six months of active military service may be counted in satisfaction of two of the three semesters of physical education.

Every student who has not completed the physical education requirement must register for physical education unless excused in writing by the dean of the College. Students are expected to have completed the physical education requirement by the end of the first semester of their senior year. Refer to physical education section of the course descriptions.

*For off-campus study during the Senior year, see *Academic Regulations: Off-Campus*.

Distribution

The fundamental presupposition of the distribution requirements is that every liberally educated person should engage in some systematic inquiry within each of the three major divisions of learning — humanities, social sciences, and natural sciences — and some comparative study of another culture. (Elementary and intermediate foreign language courses and such other courses as may be designated by the department concerned cannot be used or counted toward fulfillment of distribution requirements.)

Beginning with the class of 1983, students may not use any course to meet simultaneously more than one distribution requirement.

DIVISION I — Humanities — one course from each of the following three groups:

1. One course in philosophy or religion; or Environmental Studies 111.
2. One literature course in classical studies, English, French, German, Italian, Russian, Spanish.
3. One course from the following: history of art, history or theory of music, Dramatic Arts 102 or 103, or Fine Arts 201 (film).

DIVISION II — Social Sciences — three courses. Any three courses (unless otherwise noted) from the areas or departments of American studies, economics, history (or classical history), political science, psychology and education, sociology-anthropology, with the condition that no more than one course in the same discipline may be counted toward fulfilling the requirement.

DIVISION III — Natural Sciences and Mathematics — three courses. Two of the three courses must be a two-semester laboratory

sequence in one of the following departments: biology, chemistry, environmental science, geology, or physics-astronomy. The third course must be chosen from a different department in Division III other than the two-course laboratory sequence and may be either another laboratory course, a non-laboratory course, or a course in mathematics (excluding Math 100), contemporary science or history of science. Note: Computer science courses do not fulfill this requirement.

COMPARATIVE CIVILIZATIONS

— one course in the comparative study of civilizations to be selected from the list found in each semester's Preregistration Booklet.

Concentration

The fields of concentration consist of a required major in one or more discipline(s) (e.g. biology, French, American Studies, etc.)* and an optional minor. The required major consists of nine or ten courses of academic work in the discipline(s). In addition to these courses the department may, with the concurrence of the Committee on Academic Program, prescribe additional courses in related fields. The optional minor usually consists of five or six courses of academic work in the discipline (as specified by the department). If a student completes a minor in one or more fields of concentration, this fact will be noted on the permanent record.

The major field of concentration will normally be chosen during the student's sophomore year, but application to a department for acceptance as a major may be made any time in the first two years. Acceptance of a student as a major is determined by

* Or the Self-Developed Major (See page 117).

the department concerned on the basis of stated criteria. The department then assigns the accepted student to an adviser, using the student's stated preference as one of the bases for assignment. A student who is not accepted for a major field of concentration during the semester in which the twenty-second course will be completed will be required to withdraw from the College.

If a student intends to major in more than one department approval must be secured from each department. The

program shall then be developed in consultation with both departments and must be approved by both, and the student will therefore be advised jointly by a member from each department. The same course may be counted for more than one major except for courses under the Self-Developed Major Program.

Students who wish at any time to change a major must be accepted by the new department in accordance with normal procedures for declaring a major.

GRADUATION REQUIREMENTS



The Curriculum

Bold Face type indicates that a Major is offered in this field.

AMERICAN STUDIES

ANTHROPOLOGY (see **SOCIOLOGY** and **ANTHROPOLOGY**)

ASTRONOMY (see **PHYSICS** and **ASTRONOMY**)

BIOLOGY

CHEMISTRY

CLASSICAL STUDIES

COMPARATIVE CIVILIZATIONS

COMPUTER SCIENCE

DRAMATIC ARTS (see also **THEATRE** and **DRAMATIC LITERATURE**)

ECONOMICS

EDUCATION (see **PSYCHOLOGY** and **EDUCATION**)

ENGLISH

ENVIRONMENTAL STUDIES

FINE ARTS

FRENCH

GEOLOGY

GERMAN and **RUSSIAN**

GREEK (see **CLASSICAL STUDIES**)

HEBREW (see **CLASSICAL STUDIES**)

HISTORY

HUMANITIES

INDEPENDENT STUDY and

RESEARCH (see **SPECIAL PROGRAMS OF STUDY**)

INTERDISCIPLINARY STUDIES

INTERNATIONAL STUDIES

INTERNSHIP PROGRAMS (see **SPECIAL OPTIONS OF STUDY**)

ITALIAN (see **SPANISH** and **ITALIAN**)

ITALIAN STUDIES

JUDAIC STUDIES

LATIN (see **CLASSICAL STUDIES**)

LATIN AMERICAN STUDIES

LIBRARY RESOURCES

MATHEMATICS

MILITARY SCIENCE

MUSIC

PHILOSOPHY

PHYSICAL EDUCATION

PHYSICS and **ASTRONOMY**

POLITICAL SCIENCE

PSYCHOLOGY and **EDUCATION**

PUBLIC SPEAKING

RELIGION

RUSSIAN (see **GERMAN** and **RUSSIAN**)

RUSSIAN AND SOVIET AREA STUDIES

SCIENCE

SOCIOLOGY (see **SOCIOLOGY** and **ANTHROPOLOGY**)

SPANISH and **ITALIAN**

STUDIES IN THEATRE and **DRAMATIC LITERATURE**

COURSES OF STUDY

When two course numbers, followed by a single description, are separated by a comma either course may be taken without the other, although the two are normally taken together as a one-year course.

When two course numbers, followed by a single description, are separated by a comma, and preceded by an asterisk, the first course may be taken without the second, although the two are normally taken together as a one-year course. The first course, however, is a prerequisite for the second.

When two course numbers, followed by a single description, are separated by a hyphen, the work of the two semesters constitutes an integral, indivisible one-year course. Students who pass the first semester receive a grade of "S." When the second semester is successfully completed, the grade is recorded and credit is given for both courses. Those students who fail the first semester receive "F" and may not take the second semester course.

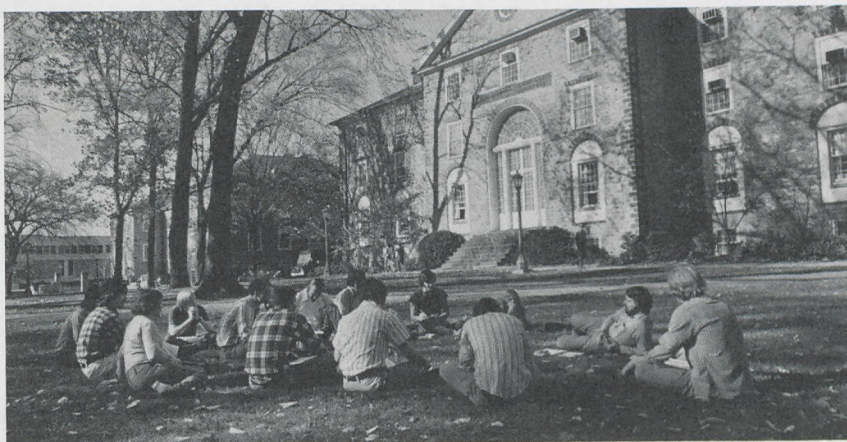
American Studies

Associate Professor Malsheimer, *Director*

American studies, an interdepartmental program offered in cooperation with 11 participating departments, is dedicated to the discovery, exploration and analysis of significant interrelationships and contrasts between American and other civilizations; the American past and present; and the diverse components that make up American culture. The program seeks to provide an innovative and intellectually coherent approach to the study of American culture which will allow students to gain a broad comprehension of the American experience, to think systematically about the nature of cultural analysis, and to analyze a topic of their choice from different disciplinary perspectives in course work and a research project.

The American Studies Program encourages majors to take advantage of the rich cultural resources of the region and to participate in the many off-campus programs sponsored by Dickinson, other colleges in the Central Pennsylvania Consortium and by the American Studies Program. Each year the American Studies Program brings distinguished authorities on American culture to Dickinson for lectures and classroom visits and sponsors field trips to historical sites, museums, cultural events and regional meetings of the American Studies Association. Programs of special relevance to American studies majors include the Harrisburg Urban Semester, the Washington Semester, Internship Programs Off-Campus, and approved "In Absentia" programs, such as a junior semester of course work in American studies at another institution either in the U.S. or abroad.

AMERICAN
STUDIES



212. **Introduction To American Studies**

The culture concept and techniques of cultural analysis applied to selective aspects of the American experience. Through readings, lectures, discussions and field work, students explore the significance of a variety of social documents including novels, buildings, films, oral testimony, historical and sociological studies, social criticism, and the artifacts of material culture.

490. **Research and Methods In American Studies**

An integrative seminar focusing on the achievements and problems of interdisciplinary study. Students examine the current literature of American studies, discuss relevant philosophic questions and, in research projects, apply techniques of interdisciplinary study to a problem related to thematic concentration. *Prerequisite: American Studies major or permission of the instructor.*

491. **Seminar In American Studies:**

Selected Topics Topics chosen annually on the basis of student interest and scholarly concerns in the field. Such topics, explored through reading, discussion, field work, and research, include: Technology and America; Autobiography and American Culture; The Twenties; Social Criticism in America; Literature as History;

Male and Female in America; Metaphors of American Experience; Film and Society; Myths, Fictions and American Life; America Through Foreign Eyes; The American Artist and Society; Studies in Material Culture; The Transcendental Aesthetic. Students should refer to the class schedule for the topic being offered in any given semester. *Prerequisite: Permission of the instructor.*

MAJOR: ten courses including

Requirement I.

Core courses in American Studies
212, 490, 491.

Requirement II.

One survey course in both American literature and American history and one course from sociology-anthropology which emphasizes theories of culture and comparative cultural analysis or conceptions of social structure and sociological theory.

- a. One semester course in American history chosen from the following:
281. 20th Century American History; 347. American Colonial History; 349. American Intellectual and Social History; 350. American Intellectual and Social History.

b. One semester course in American Literature chosen from the following: 323. Topics in American Literature; 382. American Romanticism; 384. American Poetry; 386. American Novel; 388. American Drama; 409. Seminar in American Literature.

c. One semester course in sociology/anthropology chosen from the following: 302. Social Stratification; 303. Personality and Social Change; 397. Comparative Cultures; 380. Sociological Theory.

Requirement III.

Thematic concentration. At least four courses, with no more than two of these four to be taken in one department, chosen in close consultation with the director to illuminate a topic of the student's choice. Although each topic will dictate a different selection of courses, not all of which must have American emphasis, the American Studies Program has approved the following list of American content courses offered by other departments and programs. These courses represent a partial listing of the many courses of special interest to American Studies majors offered at Dickinson.

Economics. 114. A Contemporary Economic Issue; 222. Environmental Economics; 250. Industrial Organization and Public Policy; 344. Public Finance; 347. Money and Banking; 371. Topic in Economic History.

English. 323. Topics in American Literature; 382. American Romanticism; 384. American Poetry; 386. American Novel; 388. American Drama; 409. Seminar in American Literature.

Environmental Science. 131, 132.

Environmental Studies. 111, 222.

Fine Arts. 304. American Art; 314. Twentieth Century Art.

History. 282. Diplomatic; 289. Afro-American History; 311. Studies in American History; 387. American Constitutional History; 388. Civil War; 390. Seminar in American History.

Music. 103. Twentieth Century; 108. American Jazz.

Philosophy. 215. American Philosophy; 224. Theories of History.

Political Science. 230. The City; 341. American Political Thought; 356. Public Opinion; 357. Political Parties; 358. Legislative Process; 359. American Presidency; 363. Black Experience; 390. Selected Topics in Political Science.

Religion. 211. Aspects of American Religious Culture.

Sociology/Anthropology. 224. Race; 324. Urban Problems; 360. Deviant Behavior and Social Control.

The American studies list will be updated each year to include new course offerings. "Selected Topics" courses open to majors in other fields will be credited towards the American studies major when they are judged pertinent to Requirement III in each student's program.

MINOR: American Studies 212, 491 and Requirement III.

NOTE: All courses credited towards the major must be taken for a letter grade unless they are not offered on this basis.

Anthropology

See Sociology-Anthropology

Astronomy

See Physics and Astronomy

Biology

Professors Biebel, Jeffries, B. McDonald, and D. McDonald
Associate Professor Lane, *Chairman*
Assistant Professors Brennan and Strang

The department of biology seeks to provide the liberal arts student with a broad view of the principles and functions of animal and plant life. General Biology, or its equivalent, is required of all students intending to major or minor in biology. For non-majors, General Biology satisfies the two-semester laboratory sequence required in Division III (see Distribution Requirements).

Most of the advanced courses in the department have only General Biology as a prerequisite. The freedom of choice is deliberate, to encourage purposeful planning by the individual student. Students are advised to broaden their biological training by including a variety of courses in their schedules. The elective courses are designed to introduce major biological concepts and experimental methods. An effort is made, as far as possible, to closely integrate material presented through lectures with an intensive laboratory experience. The courses provide a suitable background for students who contemplate immediate employment after commencement, as well as for those who plan to attend graduate school or a professional school. Through seminars, and independent study or research (see Special Programs of Study), opportunities are provided for students to develop their research skills. Certain specialized courses not offered at Dickinson can be taken at one of the colleges of the Central Pennsylvania Consortium.

The Dickinson biology department is housed in a spacious, well-equipped building, Dana Hall, which was completed in 1966. In addition to the on-campus facilities many courses and student research projects make use of the 3,300 acre Florence Jones Reineman Wildlife Sanctuary and its field station laboratory (see "Wildlife Sanctuary").

Recent graduates of Dickinson with a background in biology have pursued a variety of activities. Many have continued their studies in professional schools, including medicine, dentistry, veterinary medicine, law; others have gone to graduate schools for such diverse fields of study as microbiology, environmental science, marine biology. Some who have gone directly to work after commencement are employed in research laboratories, sales and management for pharmaceutical and other firms, editing of publications, as well as a variety of positions in non-biological areas. Still others have entered the teaching profession, at various levels. (Persons who wish to be certified by the Pennsylvania Department of Education, or to prepare for graduate study, should see the NOTE at the end of this section.)

105. Biological Aspects of Contemporary problems. An introduction to the biological basis of contemporary problem areas. Topics covered in the past have included: human reproduction and population; pollution, drugs, medicine, and food additives; food supply and pesticides. Central to the discussion will be limitations involved in these problems and the human place within the biosphere. *This course will not count toward a major or minor in biology. Students will not receive graduation credit for Biology 105 subsequent to receiving credit for Biology 111 or 112. Three hours classroom each week.*

111, 112. General Biology The structure and function of living systems. Lectures, discussions and laboratory observations and experiments, designed to provide the informed citizen with an understanding of the fundamental principles and methods used in biology. Three hours classroom and three hours laboratory each week.

213. Cytology An introduction to the structure and function of cells, through lectures, readings, and laboratory work. The laboratory will include various types of micro-technique, such as sectioning and staining of tissues, radioautography, and photomicrography. The class meets six hours each week. *Prerequisite: 111, 112.*

214. Ecology Interactions between organisms and their environments. The fundamental principles of ecosystem, community and population ecology, as well as interactions between individual organisms and their environments, are reviewed from historical and present-day viewpoints. Several theories are tested in field and laboratory studies. The class meets six hours each week. *Prerequisite: 111, 112.*

215. Animal Behavior The biological study of animal behavior. The evolutionary, physiological, and ecological aspects of the behavior of both vertebrates and invertebrates are examined. Through written reports and discussions, students apply biological concepts and methods to their observations of animal behavior in field and laboratory. *Prerequisite: 111, 112.*

217. Genetics Principles of heredity and their impact on population dynamics, evolution, and human society. Laboratory projects are designed to acquaint students with modern techniques of conducting genetic experiments with living organisms. The class meets six hours each week. *Prerequisite: 111, 112.*

218. Embryology The study of animal development. Approximately two-thirds of the classroom material deals with descriptive embryology and the remainder is devoted to mechanisms of development and their underlying biochemical bases. Laboratory work is evenly divided between observation of selected examples of vertebrate development and experimental investigations of developmental processes. The class meets six hours each week. *Open to freshmen with permission of*

the instructor. *Prerequisite: one semester of General Biology.*

221. Invertebrate Zoology An integrated lecture and laboratory study of the anatomy, taxonomy, evolution, ecology, physiology, and embryology of invertebrates. Representatives of the major invertebrate phyla are examined in the field and in the laboratory. The class meets six hours each week. *Prerequisite: 111, 112.*

222. Field Study of Plants A systematic survey of the plant kingdom through the collection and study of living plants. Frequent field trips are conducted as weather permits. An herbarium of named plants is prepared. Emphasis will be placed on the diverse features of plants which permit effective study of fundamental biological problems. The class meets six hours each week. *Prerequisite: 111, 112.*

223. Non-Vascular Plants: Structure and Function An integrated laboratory and classroom study of morphology and physiology of lower plants. Emphasis will be placed on reproduction, growth, and developmental physiology of selected types in culture. The class meets six hours each week. *Prerequisite: 111, 112.*

225. Vascular Plants: Structure and Function A lecture and laboratory study of the anatomy and physiology of higher plants. Structure-function relationships in the cells, tissues, and organs of vascular plants, growth and development, photosynthesis, and selected additional topics will be studied. The class meets six hours each week. *Prerequisite: 111, 112.*

226. Microbiology The taxonomy, physiology, and heredity of bacteria, and viruses. Laboratory projects are designed to provide technical competence in handling micro-organisms. The class meets six hours each week. *Open to freshmen with permission of the instructor. Prerequisite: one semester of General Biology.*

232. Molecular Biology A lecture and laboratory study covering the metabolism of the major classes of molecules found in living systems. Includes metabolic pathways, enzyme structure and function, DNA, RNA, and protein synthesis, metabolic disorders, and other selected topics. The laboratory is designed to acquaint the student with the biochemical methods used to study the properties and behavior of biological molecules and their functions in cellular metabolism. The class meets six hours each week. *Prerequisite: 111, 112, Chemistry 251, 252 or permission of the instructor.*

233. Physiology A study of physiological mechanisms in the animal kingdom, stressing the structural and functional bases of biological activities. Emphasis is on vertebrate organs and organ systems. Two hours classroom and four hours laboratory each week. *Prerequisite: 111, 112.*

234. Vertebrate Zoology An integrated lecture and laboratory study of the anatomy, embryology, physiology and evolution of vertebrates. Representatives such as the lancelet, lamprey, shark, perch, mud puppy, pigeon, chicken and rat are studied from the perspective of functional anatomy. The class meets six hours each week. *Open to freshmen with permission of the instructor. Prerequisite: one semester of General Biology.*

301. Special Topics An in-depth study of specialized subject areas of biology. A recent topic was: *Field Study of Animals*. Topic, course structure, credit, and instructor will be announced by pre-registration. *Prerequisites: at least two upper level biology courses, and permission of the instructor. Offered occasionally.*

312. Seminar Reading, conference, writing, and oral presentation of reports. Some recent subjects were: *Mammalian Reproduction, Viruses, Plant Pathology, and Community Ecology*. *Prerequisite: Permission of the instructor. One-half course.*

MAJOR: seven courses, including one of the following upper-level courses in botany: Biology 222, 223 or 225, and one of the following upper-level courses in zoology: Biology 215, 218, 221, 233, or 234. In addition, Chemistry 131, 132, 251, 252; Math 131, 132; Physics 111, 112 or 131, 132 are required. The seven biology courses required for the major may not include more than two courses in independent study or research. Of the seven biology courses required for the major, at least three must be upper division laboratory courses (exclusive of independent study-research) taken in residence at Dickinson.

MINOR: six courses, including one of the following upper-level courses

in botany: Biology 222, 223 or 225, and one of the following upper-level courses in zoology: Biology 215, 218, 221, 233, or 234. In addition, Chemistry 131, 132 are required.

NOTE: A student intending to receive certification from the Pennsylvania Department of Education at the time of graduation *must* include within his or her program a course in botany, a course in genetics and a course in ecology. Students who contemplate graduate work in biology are encouraged to gain familiarity with one or more foreign languages (especially French, German, Russian), and to consult with their faculty advisers about taking additional courses in other sciences.

BIOLOGY



Chemistry

Professors Benson and Roper

Associate Professors Leyon, *Chairman*, Schearer, and Sheeley

The chemistry department provides students with knowledge and understanding of the composition, structures, properties, and transformations of natural and man-made substances through lectures, seminars, and laboratory work.

The courses in general chemistry (Chem. 103, 104, 111, 112) are offered for students who wish to acquire or strengthen a background in chemistry but do not plan a career in science. The Principles of Chemistry course provides an in-depth introduction to chemistry for students planning to take further chemistry courses or to take a major in a science. Students considering a major in chemistry should schedule Principles of Chemistry their first year in order to allow time for a wider choice of electives in upperclass years.

The department gives course credit to students who obtain high scores in advanced placement examinations.

The advanced courses offered by the department are designed to meet the needs of students who are preparing for graduate work in chemistry or related areas, for medical or dental school or related health professions, for high school teaching of chemistry, and for a wide variety of chemistry-related positions in industry and government. In recent years a majority of majors have chosen to attend medical school or a graduate school in chemistry. Acceptances at graduate schools in chemistry have been virtually 100 percent in the past several years. For those majors who chose medical school, the rate of acceptances has been over 85 percent.

The department has 11 well-equipped teaching, research, and instrument laboratories, a chemistry library, a seminar room, stockrooms, classrooms, and faculty offices on the first and second floors of Althouse Science Hall.

Dickinson has a long tradition of obtaining up-to-date science equipment going back to the early 1800s. Professor Thomas Cooper, an outstanding teacher and professor of chemistry from 1811 to 1815 and a good friend of Joseph Priestley, bought Priestley's burning glass and other apparatus for the College after Priestley's death. The apparatus has long since been put on display in Spahr library, but the department continues the tradition of excellent teaching with excellent equipment. Some major equipment used in both teaching and research includes an atomic absorption spectrophotometer, three infrared spectrophotometers, a nuclear magnetic resonance spectrophotometer, three gas chromatographs, two ultra-violet spectrometers, and a variety of other equipment including a computer terminal.

Four laboratories are reserved for chemistry students doing independent research projects under faculty supervision.

The chemistry department program and facilities are fully accredited by the American Chemical Society.

***103, 104. General Chemistry** Similar to *111, 112 below except that no laboratory work is required. For students planning to major outside the sciences. Three hours a week classroom. *This course will not satisfy the one-year laboratory science distribution requirement. Either course will, however, count as the third required course in Division III. If students elect to take 131, 132 in addition to 103, 104, graduation credit will be dropped for 103, 104 due to similarity in course content.*

***111, 112. General Chemistry** First Semester: Some fundamental con-

cepts of atomic structure, bonding, and states of matter. Nuclear chemistry, biological effects of radiation, nuclear power. Basic chemistry of air and water pollution. Effects of man's technology. Second Semester: Basic principles of organic chemistry and biochemistry. Applications in everyday life are emphasized. Three hours classroom and two hours laboratory a week. *This course sequence will not count toward major or minor requirements in Biology or Chemistry. Students who decide to pursue chemistry courses beyond the 100 level, after completion of 111 or 112, may with the approval of the department be allowed to enroll in 132. Students will not normally receive graduation credit for both 111 and 131, or both 112 and 251.*

***131, 132. Principles of Chemistry** Atomic and molecular structure, chemical bonding, physical and chemical equilibria, the kinetics of chemical reactions, the periodic table, and the elements. The laboratory work consists of elementary quantitative and qualitative analysis. Three hours classroom and three hours laboratory a week.

***251, 252. Organic Chemistry** The chemistry of carbon compounds. The various functional groups and their transformations are studied systematically. Reaction mechanisms, the formulation of synthetic schemes, and applications are emphasized. Laboratory work involves the preparation and analysis of organic compounds. Three hours classroom and four hours laboratory a week. *Prerequisite: 132.*

***331, 332. Physical Chemistry** The fundamentals of chemical thermodynamics, kinetics, and quantum mechanics introduced as a unifying basis for the discussion of chemical and phase equilibria, electrochemistry, reaction mechanism, spectroscopy, and atomic and molecular structure. Three hours classroom a week. *Prerequisite:*

CHEMISTRY

131, 132, Physics 111, 112 or 131, 132 and Mathematics 131, 132.

***337, 338. Experimental Physical Chemistry** Quantitative experiments in calorimetry, chemical and phase equilibria, surface phenomena, chemical kinetics, electrochemistry, spectroscopy and molecular structure. Scientific report writing and the analysis of data are stressed. Four hours laboratory a week. *Prerequisite: 331, 332 or concurrent registration therein. One-half course each semester.*

353. Advanced Organic Laboratory Methods Modern techniques and equipment for isolation, purification, identification, and synthesis of organic compounds. Emphasis on instrumental methods of structure elucidation, problem solving, and current chemical literature. Three hours classroom and four hours laboratory a week. *Prerequisite: 252.*

362. Analytical Chemistry Gravimetric, volumetric, optical, electrical, and separation techniques used in modern chemical analysis. Underlying theory and understanding of the analytical problem-solving process are emphasized. Laboratory work includes atomic absorption and ultraviolet spectroscopy, coulometry, chromatography, ion-selective electrodes, and use of the computer. Three hours classroom and four hours laboratory a week. *Prerequisite: 332 or concurrent registration therein.*

431. Inorganic Chemistry Atomic and molecular structure, modern principles of chemical bonding, chemical trends and the periodic table, coordination chemistry, reaction mechanisms of ligand substitution, transition metal chemistry, and chemistry of selected transition and representative elements. Three hours classroom a week. *Prerequisite: 332.*

472. Biochemistry Introduction to the chemistry of living systems, with

emphasis on their molecular structures, chemical properties, metabolic pathways, and energetics. The chemical bases for biological phenomena are extensively examined. Three class hours per week. *Prerequisite: Chemistry 252.*

490. Advanced Topics in Chemistry Topics may be drawn from areas such as heterocycles, natural products, medicinal chemistry, food and nutrition, industrial chemistry, organic synthesis, inorganic synthesis, nuclear magnetic resonance, measurement including computer applications, spectroscopy, statistical thermodynamics and catalysis. Three hours classroom per week. *Prerequisite: Permission of the instructor.*

MAJOR: ten courses, including 131, 132, 251, 252, 331, 332, 337, 338, and at least two courses from 353, 362, 431, 472, 490. The remaining course is an elective from the five listed, independent study or independent research. In addition, Physics 111, 112 or 131, 132 and Math 131, 132 are required. (Geology 303, Geochemistry can be applied to the major).

MINOR: six courses, including 131, 132.

NOTE: Any student desiring certification by the American Chemical Society should satisfactorily complete: 131, 132, 251, 252, 331, 332, 337, 338, 353, 362 and 431; one course of independent study or independent research with laboratory; and one course from 472, 490, advanced physics, or advanced mathematics. Courses in advanced mathematics, computer science, and German or Russian are strongly recommended. Apply through the department chairman.

Classical Studies

Professors Lockhart and Sider

Associate Professors Fitts, *Chairman*, and Rosenbaum

The department of classical studies tries to do some of the things accomplished by “reading Greats” at an English university college. Its goal is to acquaint any student with those Greek and Latin authors who stand in undiminished status against the rivals of two thousand years. Without neglecting social and economic forces or forgetting the fascination of the classical tradition, the department concentrates on a few great authors, whose texts have been the inspiration of every worthwhile European mind.

CLASSICAL
STUDIES

There will continue to be a need for teachers of Latin not only in high school but in colleges and universities as well. Many students have chosen to major in classical languages as preparation for professional training, law school, theological seminary and even medical school.

Dickinson College is affiliated with the Intercollegiate Center for Classical Studies in Rome. Through its facilities Latin majors may spend a semester of either the junior or senior year studying classical life within sight of the monuments themselves. This program, administered through Stanford University, is open only to students with a B average. Scholarships are available, and full credit is given by the College for work taken at the center. Majors are thus afforded a chance to study with some of the country’s finest professors of ancient literature, history and archaeology.

The department joins with University of Leeds each summer in a dig in Northern England.

The Department offers, for the senior year, tutorial instruction that integrates the literature, history and culture of either Greece or Rome.

Hebrew texts are studied through the department of classical studies in recognition of their double role as significant sources of ancient life, as well as their continuing role in the modern humanist tradition.



Classical History

251, 252. **Hellenic History** First semester: a study of Minoan and Mycenaean civilization, the Homeric problem and rise of the polis, the Persian Wars, and the development of Athenian democracy to 478 B.C. Second semester: Greek history from 478 to 323 B.C. *Alternates with 253, 254. To be given in 1980-1981.*

253, 254. **Roman History** First semester: a study of the Roman state from prehistoric times to the end of the Republic. Second semester: Roman history from the establishment of the Principate to the death of Justinian, 565 A.D. *To be given in 1979-1980.*

Greek

101-102. **First-Year Greek** Drill on the fundamentals of Greek grammar and the study of vocabulary. Selected prose, such as Plato's *Euthyphro* and *Crito*, are read in the second semester. *Please refer to Graduation Requirements (Languages).*

211, 212. **Second-Year Greek** First semester: an introduction to Homer's *Iliad*. Second semester: the reading of selected Greek tragedies. *Prerequisite: 101-102 or the equivalent.*

233. **Herodotus** A study of Herodotus as historian. *Prerequisite: 211 or 212 with a grade of at least C. To be given in 1979-1980.*

234. **Homer** A study of the *Odyssey*, with comparative readings in Hesiodic epic. *Prerequisite: 211 or 212 with at least C. To be given in 1979-1980.*

391, 392. **Seminar: Greek Drama** A study of the Greek theater, with special emphasis on tragedy and comedy as literary types. *Given in alternate years. To be given in 1980-1981. Prerequisite: 233 or 234 or permission of the instructor.*

393, 394. **Research Seminar** A reading, research, and conference course on selected areas of Greek literature. *Given in alternate years. Prerequisite: 233 or 234 or permission of the instructor.*

MAJOR: ten courses numbered 102 or above. Classical Studies 251 and 252 may be counted toward this requirement; Philosophy 400 may be substituted for either of these Classical Studies when the subject matter is Plato.

MINOR: six courses numbered 102 or above. Classical Studies 251 or 252 may be counted toward this requirement, but not both.

NOTE: It is recommended that majors elect Fine Arts 202.

Hebrew

101-102. **First-Year Biblical Hebrew** Fundamentals of Hebrew morphology and grammar. Second term includes readings from Biblical narrative texts. *Please refer to Graduation Requirements (Languages).*

211, 212. **Second-Year Hebrew** Review of grammar, rapid reading of selected texts; Book of Amos in the second semester. *Prerequisite: 101-102 or the equivalent.*

NOTE: A major and minor are not offered in Hebrew. Interested students should refer to the Judaic Studies program.

Latin

101-102. **First-Year Latin** Drill in the fundamentals of Latin grammar and vocabulary. Selected prose from the Roman Republic is read in the second semester. *Please refer to Graduation Requirements (Languages).*

111, 112. **Second-Year Latin** Review of Latin syntax. Readings from Cicero in the first semester, Vergil's *Aeneid* in the second semester. *Prerequisite: 101-102 or the equivalent.*

233. **Roman Historians** Readings from Roman historians, with particular emphasis on Livy. *Prerequisite: 111 or 112.*

234. **Latin Poetry** Horace, *Odes* and *Epodes*; Catullus; the Elegists; Ovid. The topic varies from year to year. *Prerequisite: 111 or 112.*

331. **Cicero** Essays and letters, with stress on intellectual life of the age of Cicero. *Given every third year. To be given in 1981-1982. Prerequisite: 233 or 234.*

332. **Vergil** *Aeneid* VI-XII, studied in the light of ancient poetical theory and the epic tradition. *Given every third year. To be given in 1981-1982. Prerequisite: 233 or 234.*

341. **Caesar** The *Bellum Civile*, with special stress on Caesar as prose stylist. The nature and purpose of the *Commentaries* as a literary type. *Given every third year. To be given in 1980-1981. Prerequisite: 233 or 234.*

342. **Lucretius** The philosophy and poetry of the *De Rerum Natura*. *Given every third year. To be given in 1980-1981. Prerequisite: 233 or 234.*

351. **Juvenal** The nature of rhetorical poetry. Careful reading of the *Satires*. *Given every third year. To be given in 1979-1980. Prerequisite: 233 or 234.*

352. **Tacitus** Readings in the *Annals* and shorter works. Tacitus as historian and historical source. *Given every third year. To be given in 1979-1980. Prerequisite: 233 or 234.*

391, 392. **The Latin Language** First semester: introduction to historical grammar and syntax. Second semester: the syntax of Classical Latin. *Given in alternate years. To be given in 1980-1981. Prerequisite: 233 or 234 or permission of the instructor.*

393, 394. **Seminar** Readings and conferences in a special topic of Latin literature. Introduction to research in classical studies. *Given in 1979-1980. Prerequisite: 233 or 234 or permission of the instructor.*

MAJOR: ten courses number 111 or above, including 111, 112, 233, 234; or the equivalent of these courses. Classical Studies 253, 254 may be counted toward this requirement.

MINOR: six courses number 111 or above, including 111, 112, 233 or 234. Classical Studies 253 or 254 may be counted toward this requirement, but not both.

CLASSICAL STUDIES

Comparative Civilizations

Professor Kavolis

Associate Professor Krebs*

Assistant Professor Escovitz

The Comparative Civilizations Program is intended to orient liberal education, in some systematic manner, to the experience of mankind as a whole. Comparative civilization studies are concerned with the multiple problems of construction and living within major alternative civilizational designs and the light which the comparison of diverse civilizations can throw on our understanding both of our own traditions and of the ways in which civilizational phenomena of any kind arise from the experiences of human beings and give coherent shape to them.

The Comparative Civilizations Program consists of all courses offered at Dickinson College that focus on either (a) comparison of civilizations or of their essential components or of the historical processes by which they have evolved or disintegrated or (b) encounters between particular civilizations or between a civilization and less complex societies, in either case *provided that at least half of the time in the course is devoted to materials from outside of the traditions that have shaped the modern West or entered into its composition*. Courses offered by particular departments which also meet the criterion for the Comparative Civilizations Program and the Comparative Civilizations distribution requirement (See Graduation Requirements: Distribution) will be listed each semester in the Preregistration Booklet. In addition the program itself offers three courses:

102. Selected Problems in Civilizational Analysis Exploration of some problem of general human significance as it has been dealt with by two or more of the world's major civilizations.

105. Non-Western Civilizations A sustained study of a particular non-Western civilization: India, China,

Japan, civilizations of the Near East, Africa, or ancient America.

490. Issues in Comparative Civilizational Studies A faculty-student seminar intended for the joint discussion of questions of method and substance arising in the comparative study of civilizations. *Prerequisite: Permission of the instructor(s).*

*On leave 1979-80.

No major or minor is offered in the program. Interested students should explore the feasibility of a self-developed major, proposed in cooperation with the Committee on Comparative Civilizational Studies.

Computer Science

Assistant Professor Paul, *Coordinator*

101. Introduction to Computers The computer as a concept and as a machine. Includes the technology of computers, social uses of computing, and a treatment of selected ethical, intellectual, and philosophical issues. A brief introduction into programming is provided. *One course.*

111. Computer Science Computing as a problem-solving activity through examination of alternative algorithms for different classes of problems. Designed to develop the ability to use the College's computing system as an aid in subsequent academic work. A variety of problems will be selected from the social sciences, natural sciences, and humanities in order to reflect the wide applicability of computers to disparate disciplines. Programming will be in a higher-level language, either BASIC or FORTRAN. *One course.*

NOTE: Additional course-work in Computer Science is available in Information Structures, Information Systems, Applied Algebra, and Computability Theory. These offerings are described under the Mathematics 201, 202, 401, and 402 course numbers.

Dramatic Arts

Professor Brubaker*
Instructor Spear
Mr. Drake

101. Acting An introduction to the

principles and theories of acting combined with practical exercises. One hour of classroom and five hours of laboratory a week.

102, 103. Theatre History A study of the forms of theatre created by the great civilizations. In 102, the theatres of the Antique world, of Medieval and Renaissance Europe and the London Stage to 1800 are studied. In 103, the theatre of the Orient is surveyed with emphasis on Japanese forms, along with the history of American Theatre and that of Modern Europe.

200. Stagecraft A studio course studying the theory and practice of production: scene construction, rigging, painting, lighting, properties. Basic skills in mechanical drawing, carpentry, electricity, painting, and the manipulation of various scenic materials will be developed. Student participation in Mermaid Players productions will provide practical application of theoretical material. *Open to freshmen with permission of the instructor. Given in alternate years.*

201 Directing A laboratory course in directing. Two hours of classroom and three hours of laboratory a week. *Prerequisite: 101.*

301. Special Topics in Performance and Production An examination of selected aspects of theatrical experiment, theory, and practice. Topics chosen at the discretion of the instructor and in consultation with students, e.g., advanced study in various aspects of production, design, performance, and staging. Specific topics to be announced before registration. *Open to sophomores with permission of the instructor. Given in alternate years.*

304. Studies in Theatre History Research and discussion in selected areas and problems. Specific topics announced each year. *Prerequisite: junior or senior status or permission of the instructor. (Offered in alternate years.)*

COMPUTER
SCIENCE

DRAMATIC
ARTS

*On leave 1979-80.



Economics

Professor Houston, *Chairman*

Associate Professor King*

Assistant Professors Barone, Kapoor, and Love

Instructors S. Morgan and Sciacca**

The department of economics offers courses and a program of study designed to facilitate an understanding of the structure and functioning of the United States economy and other economic systems from divergent and critical perspectives. More specifically, the economics major provides a useful knowledge of the theoretical, statistical, and historical approaches to the study of a broad range of contemporary domestic and international economic problems and policy issues including unemployment, inflation, inequality, managerial decision making, ecological deterioration, industrial concentration, accounting, worker alienation, and third-world poverty.

In addition to the approaches mentioned above, the economics student will have the opportunity to develop research skills necessary for any college graduate, especially economists, faced with making policy recommendations. Research also supplements classroom learning by allowing students to expand their knowledge into areas of particular individual interest.

The department is committed to the use of internships as a means of education. An internship allows the student to integrate the theory of the classroom with the practice of actual experience. Receiving course credit, economics students have done internships in banks, hospitals, government agencies, and at other sites. The department also maintains an active career advising program.

Through departmental offerings, students are encouraged to think critically about the ethical and moral principles reflected in the structure and functioning of our economic system. Knowledge is seen in the classical liberal tradition as a guide to individual action in order to improve

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*On leave 1979-80.

**On leave Fall 1979.

the human condition in an imperfect world.

The Bachelor of Arts degree with a major in economics meets a broad range of individual needs in both career choices and graduate study. A student majoring in the field can obtain the background appropriate for a career in the business world or as an economist in either private or public enterprise. The department offers a concentration of courses in the field of accounting which is useful not only in the field of accounting but also in economics and business generally. As preparation for graduate school, the major provides the prerequisites for graduate study in economics, business and public administration, law, international studies, and other allied fields.

114. A Contemporary Economic Issue A current economic topic which has important public policy implications is examined. The topic, to vary from time to time, will be announced prior to registration.

121. The National Economy Introduction to the structure and functioning of the national economy; the theory of the determination of the level of national income and economic activity, including an examination of the monetary system. Within this framework, such economic problems as inflation, unemployment and poverty are studied, as well as international economic issues and problems of economic development. Current economic problems.

122. Market Systems Introduction to the description and analysis of price systems; the resolution of problems of social choice within price systems; the operation of competitive and monopolistic product and factor markets; proposals to alter markets via income redistribution, human resource development, regulation of monopolies, environmental controls, etc.; comparison of the operation of

price systems with alternative methods of making social decisions. Current economic problems.

123. Radical Political Economy A radical analysis of the operation of capitalism in America today, stressing the causes and consequences of wealth and poverty. Specific topics for discussion include the roles played in American society by racism, sexism, consumer and worker alienation, and neo-imperialism.

222. Environmental Economics A study of human production and consumption activities as they affect the natural and human environmental systems and as they are affected by those systems. The economic behavioral patterns associated with the market economy are scrutinized in order to reveal the biases in the decision-making processes which may contribute to the deterioration of the resource base and of the quality of life in general. External costs and benefits, technological impacts, limits to economic growth, and issues of income and wealth distribution will be examined. A range of potential policy measures, some consistent with our life style and some not, will be evaluated. *This course is also cross-listed as Environmental Studies 222. Prerequisite: Economics 121 or the equivalent.*

***229, 230. Accounting Principles** An introduction to the field of accounting. A conceptual approach is emphasized utilizing the logic of the double entry system as a tool to achieve an intensive understanding of organizations. Application of concepts to specific management problems is also emphasized. Designed for those interested in business and legal careers and for those who wish to apply accounting principles to understand consumer economic problems. *These courses do not count toward the distribution requirements.*

235. Business Organization and Finance The forms of business enterprise compared in their legal status and eco-

conomic importance; dominance of the corporate form of enterprise; a comprehensive introduction to basic concepts in corporate finance. *Not recommended for freshmen.*

238. Investment Analysis And Portfolio Theory Focus on private and government securities markets. Technical and fundamental theories of investment analysis. Portfolio theory and policy for individuals and institutions. *Prerequisite: Economics 121.*

253. Economics of Labor A study of market and institutional forces that shape the labor market. Topics include unemployment, differences in wages and salaries, alternative futures in the world of work, among others. The course focuses heavily on the job market for college graduates. *Prerequisite: 121 or the equivalent.*

268. Intermediate Macroeconomic Theory A study of national accounting with emphasis on consumption, investment, and government expenditure patterns. Analysis of theories of income determination and of growth at the aggregate level as well as an examination of production flows among industrial sectors. *Prerequisite: 121 or the equivalent.*

278. Intermediate Microeconomic Theory Theory of relative prices of commodities and productive services under perfect and imperfect competition. The role of prices in the allocation and distribution of resources and commodities. Economic behavior of individual economic units like consumers, firms, and resource owners. *Prerequisite: 121 or the equivalent.*

314. Special Topics See Economics 114 above. Special advanced topics. *Prerequisites: Economics 121 and possibly Economics 268 and 278.*

344. Public Finance Theoretical analysis of the interaction of the public and private sectors emphasizing problems of allocation and distribution.

Topics will include economic rationales for government, public expenditure theory, redistribution of income, collective decision-making, and taxation. *Prerequisite: 121 or the equivalent. Recommended: 278.*

347. Money and Banking A study of the role of money and credit in the United States economy. This includes an examination of the functions of money, the commercial banking system, the Federal Reserve System, and other domestic financial institutions. Various theories of money will be studied. The monetary and financial policies and practices of the Federal Reserve System and the United States Government will be analyzed and appraised. *Prerequisite: 121 or the equivalent.*

348. International Economics An introduction to the determinants of international trade patterns, the causes and consequences of public politics to control trade, the operation of the international monetary system and its effect on national economies, rich and poor country relationships, theories of imperialism, and the emerging role of the multinational corporation. Designed for economics majors and other students interested in international studies. *Prerequisite: 121 or equivalent.*

349. Economic Development An introduction to the causes of and proposed solutions to world poverty from an international political economy perspective to include the colonial legacy of the third world, underdevelopment as a regressive process, alternative development strategies and policies, social and political structures, and simple growth and planning models. Designed for economics majors and other students interested in international studies and Latin American Studies. *Offered in alternate years. Prerequisite: 121 or equivalent.*

350. Industrial Organization and Public Policy A study of the relationship between market structure and

ECONOMICS

economic performance in U.S. industry, followed by an examination of alternative public policies designed either to complement or to alter this relationship in the public interest. *Prerequisite: 278.*

*361, 362. **Intermediate Accounting Principles** An advanced treatment of the material in Economics 229, 230 with a more technical application of this material to more complex organizations. This course is intended for pre-business and pre-legal students and for those who wish a better understanding of complex business organizations. *Prerequisite: 230. These courses do not count toward distribution requirements.*

371. **Topics in Economic History** Focus on North America and Western Europe since the Industrial Revolution, on economic growth in several dimensions, especially agricultural, industrial, organizational, technological, and urban. The United States receives greatest attention. *Prerequisite: Economics 121 or permission of the instructor.*

375. **Econometrics** The application of statistical techniques such as multiple regression to the modeling and forecasting of economic phenomena. Both macro- and microeconomic applications will be studied. *Prerequisite: Economics 268 or 278; Math 221, or 321, or permission of instructor.*

376. **Alternative Economic Systems** A study of the goals and means of economic systems which are fundamentally different from our own. The systems considered will be both theoretical models, such as those of perfectly competitive capitalism and market socialism, and actual cases, including those of the Soviet Union, China, and Yugoslavia. *Prerequisite: 278.*

378. **Managerial Economics** Application of theoretical concepts to decision making processes of public and private enterprises. Focus on decision models,

forecasting, measurement of demand, costs, production, and pricing policies. *Prerequisite: Economics 278 or permission of the instructor.*

473. **History of Economic Thought** A critical presentation of significant economic theories from the beginning to the present time, viewed as an expression of the individuality of the great thinkers and of their historical background. *Prerequisite: 121 or the equivalent.*

475. **Mathematical Economics** Selected topics, to be announced prior to registration, in theoretical or applied economics, using mathematical or statistical techniques. *Prerequisite: senior major or permission of the instructor.*

495, 496. **Economics Seminar** A reading, research, and conference course on selected economic topics. *Prerequisite: senior major or permission of the instructor.*

MAJOR: nine courses in economics, including 268, 278, either 495 or 496; also Mathematics 131 and Mathematics 221. A student who has had a strong secondary school course in calculus may meet the Mathematics requirement by taking Mathematics 221 and either Economics 375 or Economics 475.

MINOR: six courses, including 121.

NOTE 1: The student who expects to major in economics should begin the Mathematics sequence early. It is recommended that 268 and 278 be elected during the sophomore year. Prospective majors, as well as those planning graduate study in economics or business, should consult the department early concerning other course options.

Education

See Psychology and Education

English

Professors Tirumalai and Wishmeyer

Associate Professors Conner, *Chairwoman*, Culp, Harms,
and Rosen

Assistant Professors Bowie,** Kranz, O'Brien, Reed, and
Winston

Instructor Rosenman

The study of English language and literature is the heart of the liberal arts curriculum, for English gives us access to everything that has been thought and felt and written. The English department tries to teach students to think critically about what they read, and to write effectively about what they think. To this end, the department offers courses in English and American literature, and in language and writing.

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The center of the English department's curriculum is a group of five core courses required of all English majors. These courses are designed to ensure students of gaining a sound background in literature and to prepare them for advanced study. Work in the core courses includes reading works of major literary figures, learning various critical approaches to literature, and understanding the cultural and historical background of each literary period. Majors also participate in a tutorial or seminar, preferably in their senior year. These courses enable the student to develop analytical skills in writing and critical thought.

Although the core courses are required of English majors, they are open to all students, and the department encourages non-majors to supplement their educational background by electing one or more core courses. Beginning with the class of 1983, English majors must fulfill requirements of the curriculum as described in this catalogue. English majors from previous classes can follow either the old or the new program. Course equivalents and other information may be obtained from the English office or from any of the professors in the English department.

**On leave Second Semester 1979-80.

The Honors Program is open to juniors and seniors who have achieved a grade point average of 3.25 in English, and who wish to study a specific author, period, or theme of literature. Honors study is also available in creative writing. Independent studies in both literature and writing are offered, and the department distributes a list of professors and their specialties to assist students in developing projects.

For the English major who is considering a career in journalism or public relations, an internship has been established in the Office of Communications and Development. Off-campus internships can also be arranged.

Some English majors like to spend a semester or year abroad during their junior year. Students have participated most recently in the university programs in London, Lancaster, Durham, Aix-en-Provence, Edinburgh, and Vienna. These programs are arranged through the college's director of off-campus studies.

After graduation, English majors have entered careers in business, teaching, law, public relations, publishing, personnel management, journalism, and government services. A list of recent graduates and their careers is published each year to indicate the specific kinds of careers which students can expect to enter.

100. English Composition Closely supervised practice in effective writing with emphasis on basic skills. Small group tutorials or individualized instruction. (Does not count toward an English major.)

111. Writing Seminars A workshop course in expository prose with emphasis on the organization of ideas and development of style. This course is recommended for students with demonstrated competence in basic writing skills.

120. Introduction to Literature Close

reading and analysis of poetry, drama, fiction, and non-fictional prose, selected from a range of chronological periods with emphasis on developing the techniques of critical reading and writing.

121. Topics in Literature Selected topics from the various periods and genres of English and American Literature, to be announced each semester, providing an introduction to the techniques of literary analysis. Topics may include Romance, Tragedy, Women in Fiction, The Short Story.

CORE COURSES (201-205):

Designed to expose the student to a broad range of English and American literature and literary criticism, these courses will each stress the development of sound reading and writing skills. Close attention will also be given the precise formal and generic character of each work and its relationship to a particular historical and cultural milieu.

201. Medieval Literature The literature of Medieval England, including *Beowulf*, samples of the earliest English drama, and the works of the *Gawain* poet, Chaucer, and Langland. *Open to freshmen with the permission of the instructor.*

202. Renaissance Literature The literature of Renaissance England, including the poetry of Sidney, Spenser, Shakespeare, Donne, and Jonson, and selected plays of Shakespeare and his contemporaries.

203. Restoration and 18th Century Literature English literature from the restoration of Charles II to the death of Johnson, including works by Milton, Dryden, Swift, Fielding, Pope, and Johnson.

204. 19th Century Literature The literature of the Romantic and Victorian periods, stressing the work of Wordsworth, Tennyson, and Arnold; other writers studied include Austen, Dickens, George Eliot, and Hardy.

205. American Literature An introductory survey of a limited number of American literary figures, including Emerson, Hawthorne, Twain, James, Fitzgerald, and Faulkner, with the emphasis on pre-twentieth-century literature.

213. History of the English Language The origins and growth of English and of American English, the sources of our vocabulary, and the processes of semantic change.

214. Structure of the English Language An intensive review of conventional grammar and an introduction to structural linguistics and to generative-transformational grammar.

218. Creative Writing A workshop on the writing of fiction, poetry, criticism, essays, and/or drama.

271. 20th Century English Literature A selective introduction to the literature of the period, through close attention to poems and novels or plays. Writers would include Hardy, Yeats, T. S. Eliot, and Shaw. *Prerequisite: one course in literature.*

291. Literature of the Western World I Readings in English from literary masterpieces of the ancient and medieval periods with particular significance for English and American Literature, notably Homer, the Greek dramatists, Vergil, medieval epics, and Dante.

292. Literature of the Western World II A continuation of 291 through the Renaissance and modern periods, including Rabelais, Montaigne, Cervantes, Moliere, Racine, Voltaire, Goethe, Dostoevsky, Tolstoi, and Ibsen.

294. Literature of the Non-Western World Readings in English translation from the literary classics of Islam and India and (in alternate years) China and Japan; emphasis on religious and cultural backgrounds and on comparison of the literary genres to their

Western counterparts. Course may be re-taken for credit to cover all the material. *Prerequisite: one course in literature.*

312. Advanced Expository Writing Special attention to the development of ideas and their critical appraisal, taught through tutorials or individual conferences. Required of teaching candidates; recommended for those considering a career in business or law. *Prerequisite: 111 or permission of the chairperson.*

319. Advanced Creative Writing Writing and discussion of fiction, poetry, criticism, and/or drama, with emphasis on editorial adaptation for the literary marketplace. *Prerequisite: 218 and the permission of the instructor.*

322. Topics in English Literature Topics may include Romance, Irish Literature, Classical and Biblical Influences on English Literature, Continental Novel. *Prerequisite: any core course; and another course in literature or the permission of the instructor.*

323. Topics in American Literature Topics may include American Indian Novels, Afro-American Literature, Autobiography, Women Writers. *Prerequisite: 205; and another course in literature or the permission of the instructor.*

328. Practical Literary Criticism A "workshop" course in which formal and stylistic characteristics of drama, fiction and poetry are examined together with the dominant schools of literary criticism. The format requires close textual analysis of several works and teaches the student to generate his or her own evaluative standards. *Prerequisite: any core course; and another course in literature or the permission of the instructor.*

331. Advanced Studies in Medieval Literature Topics may include the Medieval Romance, The Literature of

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"Courtly Love," Medieval Drama, or an interdisciplinary subject such as "Images of Death in the Art and Literature of the Middle Ages." *Prerequisite: 201; and another course in literature or the permission of the instructor.*

336. **Chaucer.** The poet and his century, with emphasis on *The Canterbury Tales*. *Prerequisite: 201; and another course in literature or the permission of the instructor.*

341. **Advanced Studies in Renaissance Literature** Topics may include *The World of The Faerie Queen*, the Image of Woman in Romance Fiction, Marlowe and Spenser, Tragedy, 17th Century Poetry: The Age of Revolution, Donne and Jonson. *Prerequisite: 202; and another course in literature or the permission of the instructor.*

342. **Renaissance English Drama** Plays from the Tudor and Stuart periods with emphasis on Marlowe, Jonson, and Webster. *Prerequisite: 202, and another course in literature or the permission of the instructor.*

346. **Shakespeare I** Early plays, comedies, and histories, and a sampling of critical approaches to these plays. *Prerequisite: 202; and another course in literature or the permission of the instructor.*

347. **Shakespeare II** Problem comedies, tragedies, and romances, and a sampling of critical approaches to these plays. *Prerequisite: 202; and another course in literature or the permission of the instructor.*

351. **Advanced Studies in Restoration and 18th Century Literature** Topics may include English Satire and the Classical Tradition; Comedy; Pope and Swift; Johnson, Boswell, and the Art of Biography; 18th Century Literature: An Interdisciplinary Approach. *Prerequisite: 203; and another course in literature or the permission of the instructor.*

356. **Milton** Detailed study of the poetry and prose with emphasis on the social and historical background and on the development of Milton as a poet. *Prerequisite: 203; and another course in literature or the permission of the instructor.*

361. **Advanced Studies in 19th Century Literature** Topics may include Austen, Keats, Tennyson, Browning, Dickens, Hardy, Aestheticism in Selected 19th Century Writers, 19th Century Literature: An Interdisciplinary Approach. *Prerequisite: 204; and another course in literature or the permission of the instructor.*

363. **The English Novel** The development of the novel as a genre, emphasizing major works from the 18th and 19th centuries; close attention to novels by Richardson, Fielding, Austen, Dickens, George Eliot, Hardy, and others. *Prerequisite: 203 or 204; and another course in literature or the permission of the instructor.*

372. **20th Century English Fiction** Close study of novels by Joyce, Lawrence, Waugh, Woolf, Orwell, Sparks, Amis, and others, in the context of different kinds of modern fiction. *Prerequisite: any core course; and another course in literature or the permission of the instructor.*

373. **20th Century English Poetry** Close readings of modern poems, with special attention to the English tradition; principal poets include Hardy, Yeats, Owen, Eliot, Graves, Auden, Larkin. *Prerequisite: any core course; and another course in literature or the permission of the instructor.*

382. **American Romanticism** Selected works by Emerson, Poe, Hawthorne, and Melville will be emphasized. *Prerequisite: 205; and another course in literature or the permission of the instructor.*

384. **American Poetry** The development of poetry in America from Anne Bradstreet to the present with emphasis

sis on selected works by Whitman, Dickinson, Frost, Stevens, Williams, Cummings, and Pound. *Prerequisite: 205; and another course in literature or the permission of the instructor.*

386. American Novel The development of the novel in America from Charles Brockden Brown to the present with emphasis on selected works by James, Twain, Melville, Fitzgerald, Hemingway, and Faulkner. *Prerequisite: 205; and another course in literature or the permission of the instructor.*

388. American Drama A study of American dramatic literature with emphasis on the works of O'Neill, Miller, Williams, Jones, and Albee. *Prerequisite: 205; and another course in literature or the permission of the instructor.*

396. Modern Drama I The formative period of 20th century drama, plays by Ibsen, Chekhov, Strindberg, Shaw, Synge, Pirandello and others. *Prerequisite: any core course; and another course in literature or the permission of the instructor.*

397. Modern Drama II Drama from 1930 to the present; plays by Brecht, Anouilh, Ionesco, Eliot, Beckett, Pinter, Stoppard, and others. *Prerequisite: any core course; and another course in literature or the permission of the instructor.*

TUTORIAL AND SEMINAR COURSES (406-410):

These courses give the student an opportunity to demonstrate, under the close supervision of a professor, a mastery of the reading and skills expected of a major. Seminars are limited to 15 students and require regular class participation, leading to the completion of a major paper. In tutorials, two students study one (or two) major authors, and alternate in reading papers at a weekly session with the instructor.

406. Tutorial in English Literature Permission of the instructor; open to junior and senior majors who have completed the core courses in English literature.

407. Seminar in English Literature Open to juniors and seniors who have completed the core courses in English literature.

408. Tutorial in American Literature Permission of the instructor; open to junior and senior English and American Studies majors who have completed the core course and two additional courses in American literature.

409. Seminar in American Literature Open to juniors and seniors who have completed the core course and two additional courses in American literature.

410. Seminar in Creative Writing Permission of the instructor; open to juniors and seniors who have completed 218 and 319.

MAJOR: ten courses, including the five core courses; at least four must be above the 200 level, including one seminar or one tutorial. All core courses must be finished by the end of the first semester, junior year; exceptions must be approved by the chairperson.

MINOR: six courses, including five courses in literature: 3 core courses and at least two other literature courses above the 200 level.

TEACHER CERTIFICATION: Majors who wish to secure teacher certification should schedule the following courses, preferably taken before enrollment in the professional semester of teacher education.

- a. English 312
- b. English 213
- c. English 214

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Environmental Studies

The Environmental Studies program offers courses designed to give students a background in: (1) the natural processes working at the surface of the earth to provide a basis for evaluation and control of environmental quality, (2) the philosophical and historical basis of man's relationship to those processes, and (3) the economic basis for decision making in regard to environmental problems. All courses are interdisciplinary in nature, content and approach, emphasize involvement in current community problems, and attempt to provide models for future alternatives. In addition to the three courses listed below, there are special courses directly related to Environmental Studies offered by various departments from time to time.

Although neither a minor nor a major is available in Environmental Studies, interested students are encouraged to create self-developed majors around a topic of their choice. Recent graduates with self-developed majors have become involved in graduate school programs, and jobs with government regulatory agencies, planning commissions, environmental consulting firms, local, state, or federal park departments and private industry.

111. Environment, Culture, and Values

A study of the effects of scientific, religious, and philosophical values on man's attitudes toward his environment and how these attitudes may affect our way of life. By focusing on a particular current topic, and by subjecting the basis of our behavior in regard to that topic to careful criticism, alternative models of behavior

are considered together with changes in lifestyle and consciousness that these may involve.

131, 132. Environmental Science An integrated, interdisciplinary study of natural environmental systems and man's impact on them. Basic concepts of ecology and energy will be examined and utilized to study world resources, human population dynamics, pollution and pollution control. Field study will be emphasized. Three hours classroom and three hours laboratory a week. *(131, 132 will satisfy the one-year laboratory science distribution requirement. Normally, only 10-15 spaces are available each year to freshmen.)*

222. Environmental Economics A study of human production and consumption activities as they affect the natural and human environmental systems and as they are affected by those systems. The economic behavioral patterns associated with the market economy are scrutinized in order to reveal the biases in the decision-making processes which may contribute to the deterioration of the resource base and of the quality of life in general. External costs and benefits, technological impacts, limits to economic growth, and issues of income and wealth distribution will be examined. A range of potential policy measures, some consistent with our lifestyle and some not, will be evaluated. *Prerequisite: Economics 121 or the equivalent.*

Fine Arts

Professor Akin, *Chairman*

Associate Professor Krebs*

Assistant Professors Bruzelius*, Hirsh, and Perinchief

Instructor Nichols

Courses in fine arts are taught with the understanding that the visual images of artists are a form of language. This visual language communicates ideas, experiences, and feelings rooted in uniquely human endeavor.

The study of visual expression requires two emphases: The history of visual expression (Art History), and the practice of visual expression (Art Studio). A close examination of the history of art discloses an extraordinary panorama of visual expression from the earliest paleolithic cave painting to the visual concepts of artists of our own era. Dickinson's collection of over 70,000 slides provides varied and extensive visual material describing this panorama. Dickinson also has a collection of original examples of visual expression, and working directly from these, the dialogue between the artist's statement and the sensitive student can become a vibrant one. Other opportunities to work from original works of art are provided through a museum internship arrangement with the William Penn Museum in Harrisburg.

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However, the study of works of art is only partial until the communicative/creative process is directly experienced. Courses in studio art provide opportunities for students to work with the tools, materials, and processes of the visual artist. In this way the problems of communicating experiences through light, color, texture, line, space and form are encountered through expressive media that ranges from paint to clay to wood; and processes from etchings to ceramics to paintings.

Our academic intent is to study visual expression as rising from a rich mix of distinctively human concerns which are celebrative of life. From this study the student can discern how critical visual expression is for a life of quality.

*On leave 1979-80.

With commitment to this study one should be able to develop a full, creative life richly informed by visual ideas.

Students graduating with a major in Fine Arts have become scholars in colleges and universities and teachers in the elementary and secondary schools. They also have become museum curators, professional photographers, ceramicists, medical illustrators, and art therapists. In each case these young professionals became broadly educated in, and articulate about, the language of art.

101, 102. An Introduction to the History of Art A survey of painting, sculpture, and architecture created by the world's leading civilizations. In 101, examples are chosen from pre-historic, primitive, ancient, and medieval European art. In 102, the arts of western Europe, beginning with the Renaissance, are considered. *(Either course satisfies Div. I Distribution Requirement.)*

109. Ceramics Ceramics processes and techniques utilized by working with highfire and lowfire clay and glazes. Emphasis is given to expressive possibilities of working with the potter's wheel and in shaping clay with the hands into pottery and sculptural forms.

201. History and Art of the Film A study of the history of the film as an art form, with emphasis on developing fruitful critical standards for the judgment of films. *(This course satisfies the Div. I Distribution Requirement.)*

202. Ancient Art The art and architecture of ancient Egypt, Mesopotamia, Greece, and Rome are considered with major emphasis devoted to the art of Greece and Rome. *Prerequisite: 101 or 102.*

203. Medieval Art European art and architecture of the Middle Ages, from the decline of the Roman Empire to

the 14th century. Particular emphasis is placed on early Christian, Romanesque, and Gothic art. *Prerequisite: 101 or 102.*

204. American Art The development of painting, sculpture, and architecture in America. Special consideration will be given to the problem of what constitutes an American style in the arts, as well as recent, specifically American, developments in 20th century art. *Prerequisite: 101 or 102, or American Studies majors.*

207. Fundamentals of Painting and Design A studio course consisting of eight hours of practical work a week: four hours supervised and four hours pursued independently. Instruction is offered in materials, several media of drawing and painting, composition, design, and color theory.

208. Drawing The course will be devoted to working from the human form during which the students will be expected to develop a sense of two-dimensional line and three-dimensional illusionistic form through the use of such graphic media as pen and ink, pencil, charcoal, conte crayon, etc. *Prerequisite: 207.*

209. Studies in Oriental Art (in different semesters: Indian; Buddhist; Chinese; Japanese, other) An introduction to the artists and art forms originating in Asian civilizations. Particular emphasis is placed on the formative role of the aesthetic spirit and its intimate relation to the civilizational context. *(This course satisfies the Div. I Distribution Requirement.)*

210. Introduction to Artists' Media and Techniques Experimentation with various media and techniques used by visual artists, including drawing with silverpoint, gessoing and gilding panels, grinding natural pigments, painting with water color, egg tempera, encaustic, oil, and fresco. *Open to all Art History and Studio Art*

Majors. Art history majors should have prerequisite of 101 and 102; Studio art majors should have 207. This course does not satisfy the distribution requirement nor does it substitute for 207. Offered on an alternate year basis.

254. Photography and Cinematography Introduction to darkroom techniques and the multi-media uses of photography and cinematography.

255. Painting Various painting media will be explored including oils, watercolor, and acrylic. *Prerequisite: 207.*

301. Italian Renaissance Art Italian painting, sculpture, and architecture of the 15th and 16th centuries will be considered. The works of Ghiberti, Donatello, Brunelleschi, Masaccio, Leonardo, Piero della Francesca, Raphael, and Michelangelo will be reviewed in some detail. Theoretical and critical writings of the period will be discussed. *Prerequisite: 101 and 102 or permission of the instructor.*

302. Northern Renaissance Art A study of the art of northern Europe in the 15th and 16th centuries, with particular emphasis on Germany and Flanders. Special consideration is given to the work of Durer, Grunewald, Cranach, and Altdorfer and to that of Hubert and Jan van Eyck, Roger van der Weyden, Memling, Bosch, and Bruegel. *Prerequisite: 101 and 102 or permission of the instructor.*

303. Baroque Art European painting, sculpture, and architecture of the 17th century will be considered. Particular emphasis will be placed upon the works of Caravaggio, the Carracci, Bernini, Borromini, Rubens, Rembrandt, Vermeer, Velasquez, and Poussin. Critical and theoretical writings of the period will be discussed. *Prerequisite: 101 and 102 or permission of the instructor.*

313. 19th Century Art Problems of Neo-Classicism, Romanticism, and Realism. Major 19th century Euro-

pean figures and movements will be surveyed, including David, Goya, Friedrich, the Nazarenes, Constable, the PRB, Delacroix, Corot, Courbet, Manet, and the Impressionists. Critical and theoretical writings of the period will be discussed. *Prerequisite: 101 and 102 or permission of the instructor.*

314. 20th Century Art A survey of major artists and movements from 1880 to the present, including Post-Impressionism, Expressionism, Cubism, Futurism, de Stijl, Suprematism, Dada, Surrealism, Abstract Expressionism, Pop Art, and current trends. Critical and theoretical writings of the period will be discussed. *Prerequisite: 101 and 102 or permission of the instructor.*

356. Sculpture Various sculpture media will be explored including clay, plaster, wood, stone, and metals. An emphasis will be placed on carving, casting, and metal welding. *Prerequisite: 207.*

357. Graphics Various print making media will be explored including woodcut, silkscreen, and etching. *Prerequisite: 207.*

391, 392. Studies in Art History Studies in selected topics of the history of art and architecture. The content of each course will be altered periodically. *Prerequisite: 101 and 102 or permission of the instructor.*

404. Seminar: Topics in the History of Art Advanced investigation of a particular artist, work, movement, or problem in the history of art. *Prerequisite: permission of the instructor.*

407. Art Historical Methods Some considerations of the research tools of art historical analysis, including bibliographical methodology and a study of the use of sources, secondary courses, and documents in art history. In addition, the major schools of art historical writing and theory since the Renaissance will be considered. *Pre-*

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requisite: 101 and 102, as well as: 1. Italian or Northern Renaissance art; 2. Ancient or Medieval art; 3. 19th or 20th Century art.

MUSEUM STUDIES AND INTERNSHIP: A two-semester academic program designed to provide a critical understanding of the cultural place of an urban museum and the responsibilities and procedures of a professional staff developing the museum as an educational institution. One course credit per semester. Offered by special arrangement. Consult with the chairperson of the fine arts department.

MAJOR: Option one, with emphasis in art history: seven courses, normally taken in the following chronological sequence: 101, 102, 202, 203, either 301 or 302, 313 and 314, plus three additional electives in art history—210 is strongly recommended. Students contemplating graduate work

in art history should acquire knowledge of two foreign languages, particularly German. Option two, with a balance between studio experience and art history: five art history courses, including 101 and 102, five studio courses, including 207. Honors and independent study courses may be applied to the major.

MINOR IN ART HISTORY: 101 and 102 plus additional courses in the department, subject to the minor adviser's approval, that suit the particular interests of the student.

TEACHER CERTIFICATION: Elementary teacher's certification for Fine Arts Majors is granted through the Central Pennsylvania Consortium, with Gettysburg College as the certifying school. Questions regarding this program should be directed to the fine arts chairman and the director of teacher education.

French

Professor Angiolillo

Associate Professors Henderson and Kline

Assistant Professors Davidson and Ferguson

Instructor N. Mellerski

Courses in French are designed to provide well-balanced training in language, literature and civilization. Students must have at least a 2.0 average in all courses to declare a major in French, and must maintain at least a 2.0 average in all French courses to remain a major.

Advanced placement scores of 4 or 5 are given course credit. The major consists of nine courses, numbered 231 and above, to include 233 and 234. A minor consists of five courses, 231 and above, to include 233 and 234.

Instruction in the elementary and intermediate levels (courses numbered in the 100 series) is on an intensive basis, with five contact hours per week. Those who do not wish to meet the requirements for a major or minor may elect any courses for which they have met the prerequisite as stated in the description of courses. All courses are conducted in French, but occasionally the department offers a bilingual course, in which the materials are available in English translation, and lectures and discussion are conducted in English.

It is possible to follow an informally "tracked" major in French, consonant with personal preferences and career plans. The student may choose among courses oriented toward language, civilization or literature. While the major is planned so that no student is too concentrated in one aspect of the discipline, it is possible to elect a grouping of courses which provides a more detailed perspective on one or more areas of the study of French cultural phenomena.

At the end of the senior year, French majors take a majors' examination. During the course of the major, and in cooperation with the departmental advisor, the student prepares an area within the scope of French studies of his

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or her choosing which will be the main focus of the examination. Each examination, tailored specifically to the interests of each student, is so constructed that the student is called upon to tie together the ideas and themes within the area he or she has elected to examine closely. The examination thus serves as a synthesizing experience, and as a point of reference for future study or career plans.

The French department encourages study in a French-speaking country. Most students study abroad for an entire academic year, although some spend one semester or a summer in foreign study. Dickinson College is affiliated with The Institute of European Study, which has programs in Paris and Nantes. A special summer session in Nantes is being offered in 1979 and may be continued in subsequent summers. Majors may elect other accredited programs with departmental approval. Normally no more than four courses taken during an academic year abroad or two taken

during a semester abroad will count toward a major or minor.

The French department sponsors a French House on campus, in which students may elect to live after the freshman year. Each year a French university student lives in the French House, and acts as a resource person for activities and programs. There is also a weekly French table in the Holland Union, where students interested in French meet over a meal with friends and faculty for informal discussion.

For the past few years, several senior French majors have worked as salaried teaching assistants within the Department. Outstanding majors may work for departmental honors. Some recently graduated French majors have been engaged in teaching French, others have earned law degrees, business degrees in international management and banking, or are working in fields such as publishing or translating.



101-104. Elementary French Complete first-year course. Intensive study of the fundamentals of French grammar, with special attention given to pronunciation and oral expression. Cultural readings in the context of language acquisition. *Please refer to Graduation Requirements (Languages).*

115. Intermediate Readings in French Reading skills. The course develops reading and translation skills exclusively, by which means the language may become a useful research tool. Development of recognition grammar and vocabulary. Students will read, translate and discuss French texts from a variety of disciplines. Not suggested for French majors or minors. *Prerequisite: 104 or the equivalent.* Either French 115 or 116 may be taken for credit, but not both.

116. Intermediate French Intensive second-year study of French, with attention to grammar review, conversation, reading in a cultural context and some writing. *Prerequisite: 104 or the equivalent.* Either French 115 or 116 may be taken for credit, but not both.

231, 232. French Conversation and Composition Emphasis on practical use of the language in different contexts of communication. Some review of grammar may be conducted to help correct deficiencies, but stress is placed on converting a theoretical understanding of the language into increasing freedom of expression. *Prerequisite: 116 or the equivalent, with a grade of at least B.* Either semester may be taken independently, regardless of sequence.

233. Introduction to French Literature Provides the student with the tools necessary for an analytical approach to the study of French literature, through the examination of selected works. Emphasis on *explication de textes*, various *genres* and methods of criticism. *Prerequisite: 116 or the*

equivalent with a grade of at least B. Required of French majors.

234. Masterpieces of French Literature A close study of a variety of works representative of their periods. *Prerequisite: 233 or the equivalent, or permission of the instructor. Required of French majors.*

243. Introduction to French Civilization Intended for students who have not yet lived in France. Major geographical, regional, historical and other influences which have shaped the evolution of French civilization. *Prerequisite: 116 or the equivalent with a grade of at least B.*

290. Intensive Oral and Written French Subtleties of the language. The level of the course assumes a sound background in the grammar of the language, and ability in oral and written expression. Discovery and explanation of difficulties in grammar and syntax, so as to enable the student to develop a sense of level of language use and style appropriate to considered and effective communication in French. *Prerequisite: 232 or the equivalent with a grade of at least B.*

305. Special Topics in French Language An extensive examination of selected aspects of the French language. Topics chosen at the discretion of the instructor and in consultation with the majors, e.g., Linguistic aspects of *la francophonie*, applied phonetics, stylistics, history of the language, etc. Specific topics to be announced before registration. *Given in alternate years. Prerequisite: 290 or permission of the instructor.*

346. La Francophonie Introduction to French-speaking civilizations outside France, and in-depth study of French Canada. Historical, political and cultural problems of minority Francophone cultures. *Offered in alternate*

FRENCH

years. *Prerequisite:* 243 or at least a semester's residence in a French-speaking country.

352. The Theatre of the Sublime The search for perfection in Classical France. Moliere, Corneille, Racine, and brief extracts from some of the major *moralistes*. Offered on occasion as a bi-lingual course in French and English. *Offered in alternate years. Prerequisite:* 234 or the equivalent or permission of the instructor.

354. Reason and Revolution The Enlightenment: a century of intellectual ferment which challenged the values of the establishment and swept them away in a revolution. Montesquieu, Voltaire, Diderot, Rousseau. Offered on occasion as a bi-lingual course, in French and English. *Offered in alternate years. Prerequisite:* 234 or the equivalent.

357. Romantics, Realists and Rebels Nineteenth-century French novel and poetry. An investigation of the major literary movements and authors of the century, to include the theory and practice of Romanticism and Realism in French letters; reaction to society by authors in revolt against bourgeois standards, and in pursuit of new modes of literary expression. *Offered in alternate years. Prerequisite:* 234 or the equivalent.

358. French Novel in the 20th Century Self-scrutiny in the novel. A study of the theory and the evolution of the modern French novel and a critical reading of selected works from the writings of novelists from Proust to the *nouveau romanciers*. Development of the novel as a form in this century, aesthetic and philosophical concerns, and consideration of the

novel as a self-conscious genre. *Offered in alternate years. Prerequisite:* 234 or the equivalent.

360. Modern French Theatre Representative plays and dramatic theory of the French stage in the 20th century. Emphasis on the idea of the theatrical avant-garde and its development from Jarry to theatre of the absurd. Offered on occasion as a bi-lingual course. *Offered in alternate years. Prerequisite:* 234 or permission of the instructor.

361. French Literature in the Renaissance Major works from prose, poetry, and theatre, with particular emphasis on Rabelais and the development of humanism, the theory and practice of the Pleiade, and Montaigne. *Offered in alternate years. Prerequisite:* 234 or the equivalent.

362. Seminar in French Literature A thorough investigation of a major figure or important literary trend (chosen at the discretion of the instructor and in consultation with the majors) in French literature with emphasis on seminar reports and discussions. Recent themes have been: Evil, Chretien de Troyes, Seduction. *Offered in alternate years. Prerequisite:* Major in French.

364. Special Topics in French Literature or Civilization In-depth analysis and discussion of selected areas and problems. Recent topics have included: Women in French Literature, Camus, Theatre of the Absurd, French-Canadian novel. *Prerequisite:* Permission of the instructor. One-half or full course. *Offered in alternate years.*

Geology

Professor Vernon

Associate Professors Hanson* and Potter, *Chairman*

Assistant Professors Barnes and Niemitz

Instructors Kimmel and Wilderman*

The geology department provides for the liberal arts student a background in the study of the earth, the oceans, and the history of life through several course offerings. For those who wish to pursue geology as an intellectual challenge or as a profession, it also provides an undergraduate program that offers lecture, laboratory work, field study, and the elements necessary to prepare for graduate study or entry into the profession at a beginning level.

GEOLOGY

The department views its program for majors as a flexible one that allows students to develop a plan of study around a set of required "core" courses according to their interests. Some graduates in recent years have moved into positions in the mineral or petroleum industry, consulting firms, secondary education, or state and federal geological or environmental agencies. Others have gone on to graduate or professional education in geology, geochemistry, geophysics, oceanography, law, and medicine.

Collectively, the five members of the geology department faculty have a broad range of earth science training and interest. Each is fully dedicated to teaching science in the liberal arts atmosphere. The students and faculty have as resources most of the equipment and materials needed for an undergraduate education in geology. Our library receives most American professional journals and a selection of journals from other countries. The laboratories are well-equipped for the study of earth materials. The equipment includes thin-sectioning equipment, microscopes, an x-ray diffraction unit, a computer terminal, and a wind-tunnel, for example. The department has its own vehicle for use by students and faculty in field work.

*On leave 1979-80.

The location of Dickinson College is unusually favorable for the study of many geologic topics, and regular field trips are a part of nearly every course the department offers. Field study is supported by equipment for sampling shallow marine environments, and for geophysical and geochemical work. Field trips away from central Pennsylvania take place every year, either as part of a formal course during the academic year, as a summer program, or during a vacation period.

In recent years these trips have included one that traced the path of Lewis and Clark (with a member of the department of history) to the west coast (summer school), one to the United Kingdom (summer school), one to the Florida Key coral reefs (spring vacation), one to New England (early summer), and several to study beach processes at Assateague National Seashore and on the Outer Banks of North Carolina.

131, 132. General Geology Geological principles and external processes, including rock weathering and soils, river action and valley development, effects of glaciers, oceans, and volcanoes. Internal processes and their effects are examined, along with earth movement in mountain building, faulting and folding. Emphasis also will be placed on the physical and biological history of the earth and the application of the earth sciences to the solution of contemporary environmental problems. Three hours classroom and three hours laboratory each week.

201. Geomorphology The description and interpretation of the relief features of the earth's continents and ocean basins with a comprehensive study of the basic processes which shape them. Two hours classroom and three hours laboratory a week. *Given in alternate years. Prerequisite: 131.*

203. Economic Geology Covers the mineral fuels, coal, oil, and gas, the major ore deposits, and the building materials including their geographic distribution, geologic occurrence, origin, and uses. *Given in alternate years. To be given in 1978-1979. Prerequisite: 131.*

205. Mineralogy A course in descriptive mineralogy in which the various mineral groups are studied. Includes crystallography, general physical properties, and chemical and systematic mineralogy. Two hours classroom and

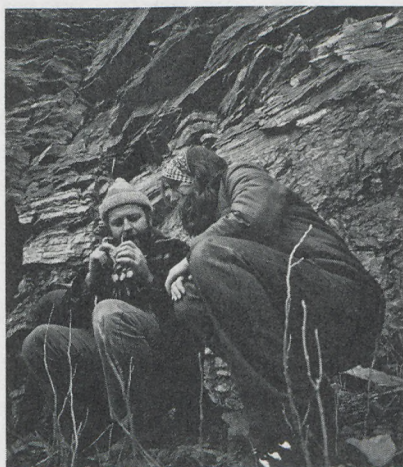
three hours laboratory a week. *Prerequisite: 131 and Chemistry 131, 132 or concurrent registration therein.*

206. Petrology A systematic study of the modes of occurrence, origin, and classification of rock types. Laboratory studies will be focused on the megascopic identification of the common rocks. Two hours classroom and three hours laboratory a week. *Prerequisite: 205.*

207. Invertebrate Paleontology A systematic study of the invertebrate fossil groups, their evolution, and their relationships to living animals. Two hours classroom and three hours laboratory a week. *Given in alternate years. To be given in 1979-1980. Prerequisite: 131, 132 or Biology 111, 112.*

209. Sedimentology A systematic study of source materials, transport, depositional environments, lithification and diagnosis of sediments. Two hours classroom and three hours laboratory a week. *Prerequisite: 131 or permission of the instructor.*

210. Stratigraphy Principles of organization and interpretation of the stratigraphic record. Emphasis on the stratigraphy of the Appalachians and selected European areas. Two hours classroom and three hours laboratory a week. Three Saturday field trips. *Given in alternate years. To be given in 1978-1979. Prerequisite: 131, 132, 205, 209.*



221. Marine Geology An interdisciplinary introduction to Oceanography, including the chemistry of seawater, the physics of currents, water masses and waves, the geology of ocean basins, marine sediments and coastal features, and the biology of marine ecosystems. Topics include the theory of plate tectonics as an explanation for ocean basins, mid-ocean ridges, trenches, and island arcs. The interaction of man as exploiter and polluter in the marine environment is also considered. *Prerequisite: one year of a laboratory science.*

301. Field Geology A course in some of the basic geological field techniques, with the preparation of topographic and geologic maps and reports from data obtained by the student in the field. Three hours classroom and three hours laboratory a week. *Prerequisite: 131, 132.*

302. Structural Geology Tectonics, properties, relationships, and positions of the component rock masses of the earth. Three hours classroom and three hours laboratory a week. *Prerequisite: 301.*

303. Geochemistry Introduction to the origin of the elements and to geochemical cycles in the earth's atmosphere, hydrosphere and lithosphere.

Includes radioactive dating methods and stable isotope geology. *Given in alternate years. To be given in 1979-1980. Prerequisite: Chemistry 131 or concurrent registration therein. May be counted toward a chemistry major.*

311. Special Topics In-depth studies in special geological topics to be offered on the basis of need and demand. Recent topics have included the Geology of Pennsylvania and Land Use Planning. *Prerequisite: Permission of the instructor. One half or one course.*

315. Historical Geology The history of the earth, its changing features, and the development of its animal and plant inhabitants. Two hours classroom a week. *Given in alternate years. To be given in 1978-1979. Prerequisite: 209 and 302. One-half course.*

318. Optical Mineralogy Crystal optics and use of the polarizing microscope for the examination of minerals by the immersion method and rocks in thin section. Two hours of classroom and three hours laboratory a week. *Given in alternate years. To be given in 1979-1980. Prerequisite: 206 or concurrent registration therein.*

324. Seminar A reading, research, and conference course on topics in geology and related interdisciplinary fields. *Prerequisite: Permission of the instructor. One-half course.*

MAJOR: nine courses including 131, 132, 205, 206, 209, 301, and 302. In addition, Chemistry 131, 132 is required.

MINOR: six courses including 131, 132.

NOTE: The Department strongly urges students who plan to continue in graduate school to complete Mathematics 131, 132 and Physics 111, 112 or 131, 132. Under appropriate circumstances Physics 202 might also be appropriate. Virtually all graduate geology programs expect their students to have a firm foundation in Chemistry, Calculus, and Physics.

GEOLOGY



German and Russian

Professors Bogojavlensky, *Chairman*, and Kellinger
Associate Professors Rollfinke* and Segall
Assistant Professor Ramin

The German and Russian programs are designed to offer students a variety of courses in language, literature, and civilization. Classes are small and intensive. The study of German or Russian language is seen as preparatory to the upper level courses in literature and civilization. But the language courses also function to introduce students to special ways of learning and seeing that illuminate our own culture and language.

GERMAN,
RUSSIAN

The upper level courses (200 and above) introduce students to German and Russian culture, mainly by way of their literatures, but also by way of other arts and cultural artifacts. In literature courses, as in language classes, a variety of approaches is stressed. One course does literary history, another does textual analysis, still another does hermeneutics. In one course a student may look at two centuries of literature and art, in another spend three weeks on one poem.

The study of German or Russian at Dickinson does not prepare the student for any one career or occupation so much as for a variety of careers. The department tries to teach how to think, to learn, to grow, and above all commitment to these things. German and Russian are the tools used, and they are more. Writers like Goethe and Tolstoy, Kafka and Dostoyevsky, are models of humane intellect whose commitments live on in their writings. The German and Russian cultures embody the heights of human achievement as well as human failure. To study German or Russian language, literature, and civilization is to get to know one's own possibilities.

German and Russian studies mesh with extracurricular life at Dickinson in the International House (a dormitory where life goes on in various languages), in the

*On leave Spring, 1980.

language clubs and language tables, in films, excursions, and other activities. They mesh too with other programs. German and Russian Studies majors have had complementary majors in Fine Arts, Biology, Music, other languages, Political Science, History, Philosophy, Physics, Religion, and other fields. The two majors have illuminated one another. German and Russian Studies students have gone on to such graduate schools as Cornell, Johns Hopkins, and North Carolina in German and Russian, and also in Religion and Sociology. They have become business executives, teachers, research scientists, and lawyers.

German

101-104. Elementary German An intensive study of the fundamentals of German Grammar with an eye to developing reading, writing, speaking, and understanding skills. Classes are small, meet five days a week, and move quickly. Beginning students are reading stories and writing short essays within a few weeks.

115. Intermediate Readings in German Readings with attention to translation as well as to the mastery of problem areas in the grammar. *Prerequisite: 104 or the equivalent. See Note 2.*

116. Intermediate German Introduction to conversation and composition using the skills acquired in 101 and 104 or in similar courses. Special attention is paid to grammar problems. Readings include contemporary essays and/or fiction. Classes are small and intensive, meeting five days a week. *Prerequisite: 104 or the equivalent.*

215, 216. Topics in Germanic Studies An examination of some topic related to German culture, with format and content to be determined each semester. Recent topics include: The Grotesque in German Art and Literature,

Faust through the Ages, Women in Scandinavian Literature. *Prerequisite: instructor's permission.*

231, 232. German Conversation and Composition Advanced practice in reading, writing, speaking, and understanding German using current political and social events, stories, essays, and other materials as the topics for discussions and writing assignments. Normally only one semester of this sequence is taken before the student moves into literature courses. *Prerequisite: 116 or the equivalent.*

236. Introduction to German Literature An introduction to selected works of German literature and to the tools, methods, and purposes of studying literature. *To be given in the spring semester of each year. Prerequisite: German 116 or the equivalent.*

301. German Literature from its Beginnings to the Reformation A study of writers from the days of Charlemagne through the Middle Ages to the age of Martin Luther (from about 800 to the mid-1500s). Special emphasis is on epics like the *Nibelungenlied*, on the songs of the wandering troubadours, and on writers like Erasmus and Martin Luther. *Given in the fall semester in alternate years, next in 1980-1981. Prerequisite: 236 or instructor's permission.*

304. German Literature of the Baroque, Rationalism and Sturm Und Drang A study of writers from the Thirty Years War through the Age of Reason to the beginnings of the modern age of German literature (the early 1600s to the end of the 1800s). Some, like Gryphius and Grimmelshausen, are not well known. Others, like Lessing, Goethe, and Schiller, have left a lasting mark on world literature. *Given in alternate years, next in 1980-1981. Prerequisite: 236 or instructor's permission.*

305. The Age of German Classicism A detailed study of the writings of

Goethe and Schiller, Germany's greatest writers, and the era in which they lived and worked (the mid-1700s to 1832, the year Goethe died). *Given in alternate years, next in 1979-1980. Prerequisite: 236 or instructor's permission.*

307. The Age of Romanticism A study of the generation of writers after Goethe and Schiller (the 1790s to the 1830s), people like E. T. A. Hoffman, Brentano, and the brothers Grimm, whose stories, poems, and fairy tales have had a powerful effect on the likes of Poe and Hesse. *Given in the spring semester in alternate years, next in 1979-1980. Prerequisite: 236 or instructor's permission.*

308. German Prose and Poetry from Realism through Expressionism A study of Grillparzer, Heine, Stifter, Storm, Fontane, Mörike, and Hauptmann (from the mid-1800s to the 1920s), writers only gradually being rediscovered as some of the greatest masters of verse writing and story telling. *Given in the spring semester in alternate years, next in 1979-80. Prerequisite: 236 or instructor's permission.*

309. German Drama of the 19th Century A study of the main dramatists and dramatic movements from the French Revolution through the social and political turmoil of the mid-1800s to the fall of the Austrian and Prussian empires in the First World War. Grillparzer, Grabbe, Kleist, Büchner, Hauptmann, and Wedekind were founders of modern drama. *Given in English in alternate years, next in 1980-1981. Prerequisite: instructor's permission.*

311, 312. Modern German Prose and Poetry German prose and poetry from about 1900 to the present, including writings by Rilke, Mann, Hesse, Kafka, Böll, Grass, as well as more contemporary writers. *Given in alternate years, next in 1980-1981. German 312 in English. Majors and minors are required to do primary reading in*

German and take an additional seminar hour conducted in German. Prerequisite: instructor's permission.

313. Modern German Drama A study of movements in 20th-century German drama from expressionism to the contemporary scene, including the dramatists Hauptmann, Wedekind, Kaiser, Brecht, Frisch, Dürrenmatt, as well as more contemporary writers. *Given in the spring semester in alternate years, next in 1979-1980. Majors and minors are required to do primary reading in German and take an additional seminar hour conducted in German. Prerequisite: instructor's permission.*

314. Seminar in German Literature and/or Language A thorough investigation of a significant figure or major development in German literature or an extensive examination of selected aspects of the German language, with emphasis on seminar reports and discussions. Recent topics include: *Böll und Grass, Sagen und Legenden.* *Given in alternate years, next in 1979-1980. Prerequisite: German major or instructor's permission.*

MAJOR: Nine courses, numbered 215 and above, including 236 and, normally, 314. Eight of these courses must be taken in the department, and at least six of the nine courses must be in the German language. Any courses toward the major taken outside the department must be approved by the German section.

Every German major who spends the junior year abroad is required to enroll in at least one German course (not independent studies) during each semester of the senior year.

MINOR: Five courses numbered 215 or above, normally including 231 or 232. Four of these courses must be in the German language.

GERMAN

NOTE 1: To elect a major, a student must have attained an inclusive average of at least 2.00 in all German courses taken in college.

NOTE 2: German 115 and German 116 are similar in course content, therefore, either one, *but not both*, may be taken for credit.

Russian

101-104. **Elementary Russian** An intensive study of the fundamentals of

Russian grammar, with an emphasis on the development of reading, writing, speaking and understanding skills. Short stories and songs will supplement the text. *Please refer to Graduation Requirements (Languages).*

116. **Intermediate Russian** Advanced grammar review incorporating controlled reading and composition. Emphasis on speaking competence continued through oral reports and conversational topics. *Prerequisite: 104 or the equivalent.*

200. **Advanced Training in the Russian Language** Emphasis on the develop-



ment of reading, speaking and writing skills. Reading of simple texts to acquaint the student with a variety of styles of the Russian language, concentration on some of the more difficult problems in the Russian grammar, translation, written composition, vocabulary building, and intonation. *Prerequisite: Russian 116 or equivalent, with a grade of at least C.*

231, 232. Russian Conversation and Composition Practice in the techniques and patterns of everyday conversation, especially as these reflect different cultural orientation. Reading and discussion of short works by well-known Russian authors. *Prerequisite: 200 or the equivalent, with a grade of at least C.*

233, 234. Masterpieces of Russian Literature Reading and discussion of literary works by representative authors from the pre- and post-Revolutionary periods. *Prerequisite: 200 or the equivalent, with a grade of at least C.*

251. Russian Culture and Civilization to the 1840s A study of significant features of Russian literature, art, architecture, music and theater from the times of the Scythians through the middle of the 19th century. Major developments during the Kievan, Muscovite and Imperial periods will be highlighted. Films, slides and records will supplement the reading and lectures. *Conducted in English. Offered in alternate years, next in 1979-1980.*

252. Russian Culture and Civilization from the 1840s through the Revolution On the eve of World War I the Russian avant-garde rose to a position of leadership in the arts of Western Europe. A study of the various phases in Russian intellectual thought, literature, art and music during the 1840s, 1860s, 1880s and the decade preceding World War I will trace this development. Films, slides and records will supplement the reading and lectures. *Con-*

ducted in English. Offered in alternate years, next in 1979-1980.

352, 353. Russian Literature in Translation An introduction to Russian literature, presenting its development from the earliest period to the present. Special attention will be given to works of social, political, and religious significance within the historical context. *Offered in alternate years, next in 1980-1981.*

354. The Works of Tolstoy and Dostoyevsky A study of the major works of Tolstoy and Dostoyevsky with a focus on art as a reflection of the author's interaction with his environment. *Offered in alternate years, next in 1979-1980. Conducted in English.*

355. Survey of Soviet Literature A study of Soviet literature from Gorki to contemporary authors, with an emphasis on political trends and influences. *Offered in alternate years, next in 1979-1980. Conducted in English.*

390. Topics in Russian Studies Format and content will be determined in consultation with students. *Prerequisite: instructor's permission.*

MAJOR: A major in Russian Language and Literature can be obtained through the Self-Developed Major Program.

MINOR: five courses numbered 200 or above. Four of these courses must be in the Russian Language.

NOTE: See also Russian and Soviet Area Studies which offers a major and minor program.

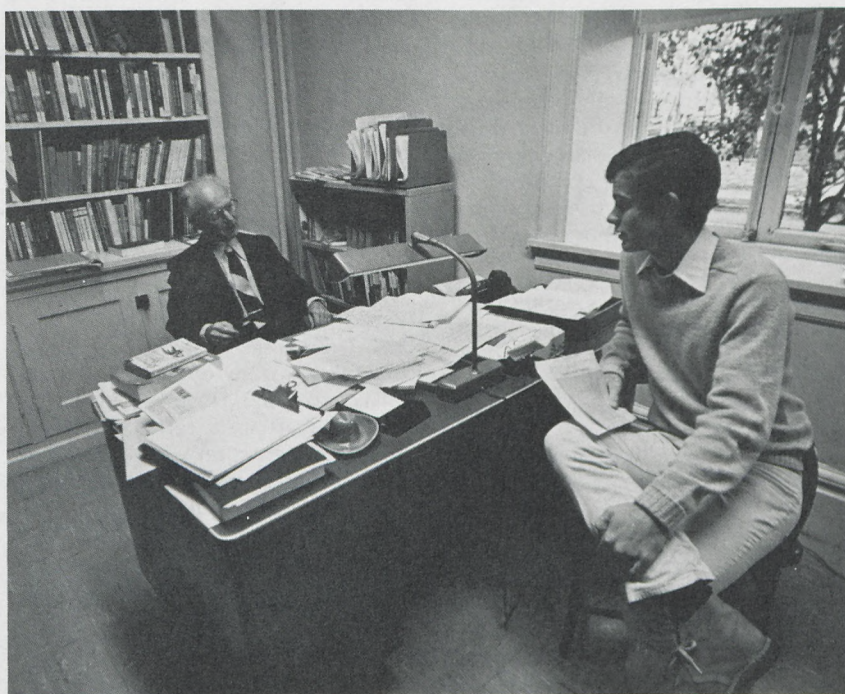
RUSSIAN

Greek

See Classical Studies

Hebrew

See Classical Studies



History

Professors Garrett and Gates**

Associate Professors Carson, Jarvis,* Rhyne,** and
Weinberger, *Chairman*

Assistant Professors Pfau and Weissman

Instructors Argersinger and Osborne

The offerings in history are planned to serve the following purposes: to inform students interested in man's past, to acquaint them with the leading interpretations of their heritage, to encourage them to comprehend and utilize historical perspectives, and to introduce them to the methodology and techniques of historical analysis. Students elect courses in the department as a component of their liberal education, as a preparation for graduate study and for the teaching of history, to complement their work in other disciplines, and to provide a background for such careers as law, journalism, and library science.

*Bologna Director, 1978-80.

**On leave Spring 1980.

111, 112. **History of Western Civilization** The elements of continuity and the phases of change in the civilization that matured in Europe from its beginnings in the Near East and Greece to its current expansion into other areas of the world.

117, 118. **American History** A survey of the colonial origins and national development of the United States from 1607 to the present. Some attention is given to interpretations by leading historians.

119. **South Asia: India and Pakistan** Following a survey of the origin and formation of traditional Hindu civilization and the impact of Moslem culture, the emphasis is placed on nineteenth and twentieth century British India, with particular attention to the rise and triumph of nationalist movements.

120. **East Asia: China and Japan** An introduction to the classical tradition of Chinese and Japanese civilizations followed by an analysis of the changes brought about by the impact of modernization in the 19th and 20th centuries.

190. **Introduction to History** Through selected readings and discussion about the nature of history, and through analysis and projects related to selected historical problems the student is introduced to the art and techniques of the discipline. Normally elected in the freshman year.

225. **Medieval History** The development of European civilization from the disintegration of Roman imperial authority to the late 13th century, with some attention to eastern Europe. *Not open to students with credit for 325. Given in alternate years. To be given in 1980-1981.*

227. **Europe in the Renaissance, 1300-1500** The emergence of Europe from the Middle Ages. Particular attention will be given to the interrelationships of economic, social, political, and cultural change in Western Europe,

with special emphasis being placed on Italy. *Not open to students with credit for 327. Given in alternate years. To be given in 1979-1980.*

228. **Europe in the Reformation, 1500-1650** A study of the interaction between the unresolved tensions (social, religious, political, and economic) in Western Europe, and the men who shaped the Reformation and Counter-Reformation. Particular attention is given to Germany and to Luther. *Not open to students with credit for 328. Given in alternate years. To be given in 1979-1980.*

243, 244. **English History: 55 B.C. to Date** First semester: The emergence of a unified English society, and its political expression, to 1660, with particular attention to social, economic, and institutional developments. Second semester: The political, economic, and social development of Great Britain, domestically and internationally, as a major power in the 18th and 19th centuries, and the abandonment of that role in the 20th century.

253, 254. **History of Russia** First semester: from earliest times to the reign of Nicholas II. Second semester: fall of the czardom, the Russian revolution, and the Communist state from Lenin to Krushchev.

271. **18th Century Europe: Utrecht to Vienna, 1713-1815** The development of the *Ancien Regime*. The focus will be on political, social, economic, and intellectual aspects of the pre-revolutionary period, although the impact of the French Revolution and Napoleon will be assessed.

272. **19th Century Europe: 1815 to 1914** Starts with the Congress of Vienna and proceeds with the reaction after 1815, the revolutions of the mid-century, unifications of Germany and Italy: problems of nationalism, imperialism, liberalism; and concludes with diplomatic background for the First World War.

HISTORY

273. 20th Century Europe: Since 1914 Political, economic, and social sequels to Versailles; the challenge to European dominance and changing relations with Russia and the United States; the rise of totalitarianism to World War II and its consequences.

281. 20th Century American History The social, economic, and political development of the United States since 1900. Domestic events are stressed.

282. Diplomatic History of the United States Emphasis upon the diplomacy of the early Republic, expansion, the emergence of the United States as a world power, and the use of collective security.

289. Afro-American History A survey of black history from pre-colonial Africa and the origins of slavery in the American colonies to the urban migrations of the 20th century.

311. Studies in American History Selected areas and problems in American history. Topics for 1979: Ethnic History; American Cities. *Prerequisite: 190 or permission of the instructor.*

313, 314. Studies in European History Selected areas and problems in European history. Topics for 1979: Women in History; World War I; Tudor England; Age of Revolution, 1780-1830. *Prerequisite: 190 or permission of the instructor. 314 offered in Bologna only.*

315. Studies in Comparative History Selected trends and problems studied comparatively in various periods and geographical areas. Topics for 1979: History of Social Movements; Nationalism & Imperialism in S. Asia; Japanese Modernization; Middle East. *Prerequisite: 190 or permission of the instructor.*

345. English Constitutional and Legal History A technical approach to the evolution of governmental and legal

institutions in the context of English society. *Offered occasionally.*

347. American Colonial History English America from the epoch of settlement through the achievement of independence. Particular attention is given to the causes and consequences of the American Revolution. *Given in alternate years. To be given in 1980-1981.*

349, 350. American Intellectual and Social History A study of ideas, myths, and popular opinion in their social context with attention to American Puritanism, the Enlightenment America, the Romantic era, labor and reform movements, intellectual revolt and conservatives, radicals, and liberals in modern America.

357. European Intellectual History Main currents of Western thought from the 17th century to the present. The interaction of ideas and social development is stressed with attention to the influence of science. *Given in alternate years. To be given in 1980-1981.*

358. 19th-20th Century European Diplomacy European diplomatic history from the Congress of Vienna through World War II. *Offered occasionally.*

387. American Constitutional History The framing of the Federal Constitution and its historical development, with emphasis on evolving interpretation by the courts. *Given in alternate years. To be given in 1979-1980.*

388. American History in the Civil War Period An analysis of the political, economic and intellectual aspects of nineteenth century America from 1828 to 1865. Attention is given to the causes and course of the Civil War.

389. Seminar in European History: Selected Topics Topic for 1979: Facism. *Prerequisite: Permission of the instructor.*

390. Seminar in American History: Selected Topics Topics for 1979: U.S. and Cold War; Great Awakening. *Prerequisite: Permission of the instructor.*

490. Historiography The history of historical writing derived from works of representative historians, past and present, as well as analysis of historical craftsmanship. The evolution of research techniques and historians' concepts about the nature and purpose of history receive attention. *Prerequisite: six courses in history.*

491. History Seminar An introduction to the craft of the historian. Includes discussion of theories on the meaning of history and study of research methods involving the solution of selected problems. *Prerequisite: Permission of the instructor.*

MAJOR: nine courses including:

I. 190 (Must be completed or in cursu at time of acceptance as a major.)

II. One of the following: History 389, 390, 490, 491, Philosophy 224 or, when approved in advance by the department, a semester course in history in Independent Study or Independent Research which treats some aspect of the methodology or philosophy of history.

III. Two courses from one group and one from the other:

GROUP A: (European) 225 or 325, 227 or 327, 228 or 328, 243, 244, 253, 254, 271, 272, 273, 313, 345, 357, 358, 389.

GROUP B: (American) 281, 282, 289, 311, 347, 349, 350, 387, 388, 390.

MINOR: six courses, including at least two in American and two in European history.

NOTE 1: One of the following courses

may be substituted for one of the courses in Group A: Classics 251, 252, 253 or 254.

NOTE 2: Training in computer science, foreign languages, and social science methodologies are desirable for those contemplating graduate study.

Humanities

120. Masterpieces of the Western World A small number of masterworks representing the various arts are studied and celebrated with the intention of discovering the conditions and characteristics of artistic inspiration and achievement which both glorify the culture of a specific era and transcend the boundaries of time and place to speak to every age. Works from the ages of Classical Athens, Seventeenth Century Europe, and Pre-Revolutionary Russia are analyzed with emphasis upon the dialectics of form and content and upon their social and biographical contexts. *Open to freshman and sophomores.*

220. Masterpieces of the Western World This course will have the same syllabus as Humanities 120. Identical materials are covered and lectures given jointly. However, the course will have its own discussion groups, and a more advanced level of interpretive skills will be assumed both for group discussions and for evaluation. *Open to Juniors and Seniors.*

NOTE: Students may take either course for credit but not both. Neither 120 nor 220 fulfill Distribution requirements.

HISTORY

HUMANITIES

Interdisciplinary Studies

Courses given under this rubric are taught by faculty members from at least two different disciplines.

110. Perspectives on Society, Science, and Self The problem of perspective as a constant in human knowledge at all levels. Each unit aims at disrupting the student's ethocentrism while helping to develop and refine the skills of investigation, analysis, evaluation, and communication as a means of working through the resulting disorientation. *Open only to entering freshmen.*

300. The Bologna Practicum An interdisciplinary seminar focusing on the City of Bologna. Guest participants include administrators, political figures, art experts, and others with local expertise. *To be offered only in Bologna.*

311-312. Seminar on Jerusalem An interdisciplinary course, involving guest speakers and lecturers, directed towards developing an historical perspective and a sense of the student's place in time, sensitivity to the cultural differences and perspectives which exist side by side in Israel, and an awareness of the international political issues of which Israel is a focal point. Included is a detailed study of contemporary Jerusalem: its history, culture, religion, government, urban growth, social problems. *Offered only in Jerusalem.*

International Studies

Professor K. R. Nilsson, *Director*

An interdisciplinary major which draws on the perspectives of economics, history and political science to examine international relations in a changing world environment. To these disciplines are added cultural studies concerning a geographical area of the student's choice: e.g., a language of the area and selected courses in the area's literature, philosophy, music, art or religion. The interdisciplinary experience is completed with an integrative research seminar and a comprehensive examination. The program is intended to prepare a student either for graduate studies or for a career with an international focus.

401. Interdisciplinary Seminar Research which integrates the various disciplines in the major, normally involving the student's geographic area.

Core Disciplines: Eleven courses in the core disciplines (economics, history, and political science) are required, in any 6: 3: 2 combination which includes Economics 348 (International Economics), History 282 (U.S. Diplomatic History), Political Science 240 (International Relations) and either Political Science 370 (American Foreign Policy) or Political Science 375 (American National Security Policy). Example: Six courses in economics (including 348); plus three courses in history (including 282); plus two courses in political science (including 240 and either 370 or 375).

One course in each of the core disciplines may be taken on a pass/fail basis, with the exception of Economics 348, History 282, and Political Science 240.

Area Courses: Four courses in one geographical area (Asia, Latin America, Russia and Soviet Union, Western Europe), exclusive of courses in the core disciplines; three must be in the humanities. However, when the number of courses available in a given geographical area is inadequate to the student's needs — in the judgment of the supervising committee and the respective area representative — he or she may substitute area courses from other disciplines, including economics, history, and political science. As many as two of these courses may be taken on a pass/fail basis. (Total pass/fail from core and area courses = five.)

Interdisciplinary Independent Study: During one semester of his or her last year, the student will enroll in an independent study. In it he or she will prepare for an examination in the core disciplines (international relations, international economics, and diplomatic history) and in his or her area.

The examination will be administered in the eighth term by the supervising committee, which will announce at the beginning of each term whether the examination will be oral, written, or both.

Foreign Language Proficiency: (1) Satisfactory completion of courses through the intermediate level in a language appropriate to the geographic area chosen. (2) If a language is not offered at Dickinson, a proficiency examination will be administered with the assistance of the modern languages department.

Study Abroad — *One or two semesters (fall, spring, summer):* A student may choose, with the approval of the supervising committee, any program of foreign study in the context of an international studies semester abroad program. Although majors are encouraged to go abroad, study abroad is not required.

Requirements for a Minor — Economics 348, History 282, Political Science 240; an additional course in each of the preceding core disciplines; two courses from the humanities in a geographic area; the interdisciplinary seminar. Total: nine courses.

Course Offerings in the Geographic Areas: The supervising committee and the respective area representatives will decide which courses in the geographic areas qualify for the major. The general operating principle for deciding will be that the list of courses should be as inclusive as possible. For example, any course in French literature would satisfy the western European area requirement. (A list of courses in the four areas is available in the coordinator's office.)

INTERNATIONAL STUDIES

Italian

See Spanish and Italian

Italian Studies

The opportunity is available to students to take an interdisciplinary minor in Italian Studies. The program includes work in the Italian language and literature as well as special courses in other departments that are related to specific aspects of Italian culture and civilization. The minor consists of five courses: three courses in Italian (231, 250, and 290) and two courses from the following group*:

Fine Arts 301 — Italian Renaissance Art

Fine Arts 302 — Baroque Art

Fine Arts 403 — Seminar: Problems in Italian Art

Music 104 — History of Opera (formerly 302)

Music 351 — Seminar in Medieval and Renaissance Music

History 227 — Europe in the Renaissance (1300-1500)

Political Science 395-396 — Studies in Modern European Politics

NOTE: One Independent Study may be chosen in place of one of the electives from the above list.

*Elective course selections must be approved, and the completion of the minor certified, by the coordinator of the program.



Judaic Studies

Associate Professor Rosenbaum, *Director*

An interdisciplinary major designed to allow broad comprehension of Jewish civilization in its interaction with the civilizations of the Ancient Near East and Europe, but deep enough to prepare students for further study or careers in Judaics and related vocational pursuits.

MAJOR:

I. Required courses:

- a. Religion 211, 206 (Jews and Judaism in the U.S.; Modern Jewish Thought)
- b. Religion 103 (Torah, Prophets, & Writings)
- c. Religion 204, 205 (Jewish History) Both courses must be completed by the end of student's Junior year.

II. One of the following *pairs* of courses:

- a. Religion 211, 206 (Aspects of American Religious Culture; Modern Jewish Thought)
- b. Religion 203, 206 (Studies in the Hebrew Tradition; Introduction to Talmud)
- c. Religion 107, 201 (The New Testament; Traditions in the History of Religions)
- d. Religion 108, 109 (The Emergence of the Christian Tradition; The Emergence of the Protestant Tradition)

tion; The Emergence of the Protestant Tradition)

III. One upper level seminar OR Independent Study, with the approval of the director.

IV. Two additional courses such as the following:

- a. American Studies 490, 491 (Seminar)
- b. Classical Studies 251, 252 (Hellenic History) 253, 254 (Roman History)
- c. English 322 (Classical & Biblical Influences in English Literature)
- d. History 190, 490 (Introduction to History; Historiography)
- e. Philosophy 230 (Philosophy of Religion)
- f. Religion 211 (Aspects of American Religious Culture)
- g. Spanish 290 (Topics in Hispanic Studies)

JUDAIC
STUDIES

LATIN
AMERICAN
STUDIES

Latin

See Classical Studies

Latin American Studies

Assistant Professor Ruhl, *Director*

The certificate program in Latin American Studies is intended to allow students with varying interests and academic majors (such as history, economics, education, fine arts, political science, international studies, anthropology and Spanish) an opportunity to develop an understanding and appreciation of Latin American civilization. It also provides students the opportunity to work closely with a

core of professors with special training, experience and enthusiasm in this field. While the program is viewed as valuable to those planning graduate work to become high school teachers, social workers, Foreign Service Officers or managers in multinational corporations, the actual level of expertise which students can acquire will depend greatly on their own commitment to the field of study. The certificate may also provide an advantage to students in seeking admission to graduate programs concerned with Latin America.

Achievement of the Certificate in Latin American Studies requires (1) the successful completion of Latin American Studies 201; (2) completion of six other approved courses or independent studies dealing with Latin America taken in at least three academic departments; (3) demonstrated language proficiency in Spanish or Portuguese, equivalent, as a minimum, to the completion of a two-hundred level conversation and composition course; (4) the completion of an interdisciplinary research paper written under the supervision of at least two faculty members from different departments, and for which one course credit will be offered under Latin American Studies 490; and (5) the successful oral defense of the research paper before a committee of at least three program professors.

201. Introduction to Latin American Studies

A multi-disciplinary, introductory course in Latin American Studies designed to familiarize students with Latin American societies through a study of their history, economics, politics, literature and culture. The purpose of the course is to provide a framework or overview to enhance understanding in the students' future courses in particular disciplines and specific areas of Latin American study. *No prerequisite, required of all Latin American Certificate candidates.*

490. Latin American Interdisciplinary

Research Research into a topic concerning Latin America which is directed by two or more faculty representing at least two disciplines. Students must successfully defend their research paper to obtain course credit. Designed to satisfy requirement four (4) of the Latin American Certificate Program. *Prerequisite: Seniors in the program.*

NOTE: Beginning with the Class of 1980, students must apply to the Latin American Studies Program by the beginning of their junior year. See also Special Options: The Latin American Studies Program.

Library Resources

Associate Professors Cieslicki, *Chairwoman*, Forbis*, and Woodworth

Assistant Professors Dupras and Wilt

Librarians Bechtel and Derry

101. Introduction to Library Research

A study of the resources of a college library including books, periodicals, indexes, abstracts, bibliographies, U.S. Government Documents, manuscripts, and reference sources in the various disciplines. Attention is given to effective research strategies, and to

selection and evaluation of sources. *One-half course credit. Offered first seven weeks of each semester.*

Independent Studies in Library topics is open only to juniors and seniors and can be taken only once.

LIBRARY
RESOURCES

Mathematics

Professors Baric, Light, and Martin

Associate Professors Harvey* and Stodghill, *Chairman*

Assistant Professor Marma

Instructor Gingrich

MATHEMATICS

The program in mathematics offers preparation for graduate work in mathematics (and related areas) as well as preparation for positions in industry or government demanding a strong quantitative background.

100. Precalculus Mathematics To prepare students for calculus whose background in mathematics is deficient. A brief review of the highlights of algebra, trigonometry, and analytic geometry. *Prerequisite: Permission of the instructor. This course does not count toward the requirements of a major or minor and will not satisfy the Division III Distribution Requirement.*

***111, 112. Finite Mathematics** Topics in logic, set theory, elementary probability, game theory, linear programming and applications. *This course will not count toward the requirements of a major or minor.*

***131, 132. Calculus and Analytic Geometry** Derivatives and integrals of functions of one variable with such applications as maxima and minima, curve tracing, velocity and acceleration, and area and volume. Brief introductions, as time permits, to functions of several variables, infinite series, and differential equations. *Prerequisite: Mathematics 100 or its equivalent preparation. Please read Note 3.*

201, 202. Special Topics Topics in either Mathematics or Computer Science to be announced when offered. *Prerequisite: Permission of the instructor. One-half or one course. Please read Note 4.*

*On leave 1979-1980.

211. Mathematical Modeling Introduction to the methodology of modeling as a technique useful in working toward the solution of real world problems. A variety of mathematical tools will be utilized at an elementary level. *This course will not count toward the requirements of a major or minor.*

221. Elementary Statistics An introduction to statistical inference, including such topics as measures of central tendency and dispersion, tests of hypotheses, and correlation. *Prerequisite: 100 or its equivalent. This course will not count toward the requirements of a major or minor.*

232. Numerical Methods for Computers A study of algorithms for the efficient computer approximation of definite integrals by numerical quadrature, the solutions of non-linear equations and of linear systems of equations, and of the solutions of differential equations. Extensive practice in computer programming. *Prerequisite: 241, 243 and Computer Science 111 or its equivalent. Offered in alternate years.*

241. Differential Equations An introduction to the study of differential equations and their solutions by elementary methods, series solutions and numerical algorithms. *Prerequisite: 132, 122 or 142. One-half course. See Note 2.*

243. Linear Algebra I Vectors, linear transformations, matrices, the algebra of linear transformations and the corresponding properties of matrices. *Prerequisite: 122, 132, or 142. One-half course. See Note 2.*

244. Multivariable Calculus An introduction to the analysis of linear and nonlinear functions of several variables, including differentiation and integration. Taylor's theorem, the chain rule and line integrals. *Prerequisite: 243. See Note 2.*

***321, 322. Statistics** An introduction to the mathematical theory of probability

and statistics, including a study of probability distributions and their parameters, statistical inference, tests of significance, estimation and tests of hypotheses. *Prerequisite: 244 or permission of instructor. Given in alternate years.*

331. Operations Research Uses of linear optimization models, solution of linear systems of equalities, the simplex algorithm, duality theory, and sensitivity analysis. The last quarter may be concerned with an additional topic such as dynamic programming or decision analysis. *Prerequisite: 243 and Computer Science 111 or permission of the instructor. Given in alternate years.*

332. Numerical Analysis Calculation of functions, interpolation and numerical integration, solution of non-linear equation, of a linear system of equations, and of a linear system least squares curve fitting. *Prerequisite: 244, 331 and Computer Science 111 or permission of the instructor. Given in alternate years.*

***341, 342. Mathematical Physics** Advanced vector analysis and matrix methods. Ordinary and partial differential equations of physics. Initial value and boundary value problems. Green's functions, spherical harmonics, and other special methods. *Prerequisites: Physics 132 and Mathematics 244.*

351. Abstract Algebra An introductory treatment of fundamental algebraic structures such as groups, rings and fields. *Prerequisite: 243 or its equivalent.*

352. Linear Algebra II An extension and deeper treatment of the material in 243. Vector spaces, linear transformations, matrices, elementary canonical forms, inner product spaces and operators on inner product spaces. *Prerequisite: 243 or its equivalent.*

361. Analysis I An exact treatment of the real numbers, convergence, continuity, differentiation, integration and infinite series. *Prerequisite: 244.*

362. Analysis II Studies in analysis. Topics to be chosen according to the interest of the students and instructor. *Prerequisite: 244 and permission of the instructor.*

372. Complex Analysis An introductory study of functions in the complex plane. Topics will include: complex numbers and functions; the theory of differentiation and integration of complex functions; sequences and series of complex functions; Cauchy's integral theorem; the Residue Theorem; conformal mappings. *Prerequisite: Permission of the instructor.*

401, 402. Special Topics Topics in either Mathematics or Computer Science to be announced when offered. *Prerequisite: Permission of the instructor. One-half or one course.*

461. Topology An elementary study of metric and topological spaces touching upon open and closed sets, compactness, and connectedness. *Prerequisite: Permission of the instructor.*

MAJOR: eight courses in mathematics, numbered above 200, including at least one of 351 or 352, one of 361 or 362 and at least three other courses numbered above 300. No more than one credit in independent studies may count toward the

major. In addition Computer Science 111 or its equivalent is required effective with the Class of 1979.

MINOR: six courses.

NOTE 1: It is recommended that every mathematics major develop a strong interest in at least one quantitative area different from mathematics.

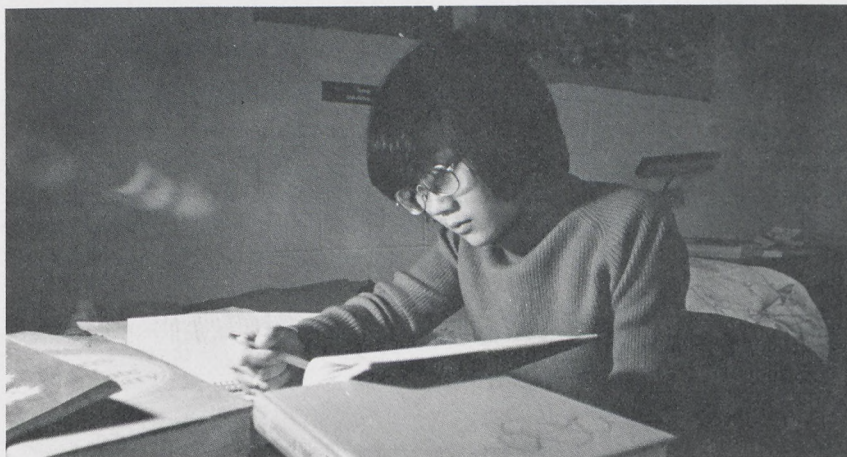
NOTE 2: 241 will be offered during the first half of the fall semester, and 243 will be offered during the second half. Majors should complete 244 as soon as possible (usually by the end of the sophomore year).

NOTE 3: Because of the similarity in course content, students will receive graduation credit for only one of 121, 131, 141; and only one of 122, 132, 142.

NOTE 4: In recent years, many topics in Computer Science have been offered under the Mathematics 201/202 labels. These include Information Structures, Information Systems, Advanced Programming, Computer Architecture, Computer Organization, etc. See Note 5.

NOTE 5: Currently there are several students working on a self-developed major in computer science. See index for Special Majors.

MATHEMATICS



Military Science

Lieutenant Colonel Cummings, Professor of Military Science
Major Kenwood Giffhorn, Assistant Professor of Military Science

Captains Jamerson and Huppmann, Assistants to the Professor of Military Science

The Department of Military Science adds another dimension to a Dickinson College liberal arts education by offering courses which develop a student's ability to organize, motivate, and lead others.

Participation in ROTC during the freshman and sophomore years incurs no military obligation. Courses during these years are designed to give the student an overview of the defense establishment, and an orientation on the role of an Army Officer.

Individuals that elect to continue in the program during the junior and senior years will be commissioned upon graduation and serve from three months to three years in the active Army.

The following courses are required to satisfactorily complete the Army ROTC program:

FRESHMAN YEAR

Fall — Military Science 101
Spring — Military Science 102

SOPHOMORE YEAR

Fall — Military Science 201
Spring — Military Science 202

JUNIOR YEAR

Fall — Military Science 301
Spring — Military Science 302

SENIOR YEAR

Fall — Military Science 401
Spring — Military Science 402

Options are available for those individuals encountering scheduling conflicts or desiring participation after their freshman year. Contact the department for further information.

Advanced Leadership Practicum: A six-week summer training program at an Army installation which stresses the application of military skills to rapidly changing situations. Participants are evaluated on their ability to make sound decisions, to direct group efforts toward the accomplishment of common goals and to meet the mental and physical challenges present to them. Completion of this practicum is required prior to commissioning and it is normally attended between the junior and senior years. Participants receive room, board, travel expenses and medical care, and are paid approximately \$550.00 for the six-week period.

Financial Assistance: Books and equipment for military science courses and the ROTC program are provided free of charge to all cadets. All juniors and seniors in the ROTC program (Advanced Course) and scholarship cadets are paid a tax-free subsistence allowance of \$100 a month and receive certain other benefits.

Physical Education Credit: A maximum of three physical education units (six required for graduation) may be satisfied by participation in Military Science Leadership Laboratory (MS 101-102, 201-202, 301-302 and 401-402).

Scholarships: Army ROTC scholarships based on merit are available. Recipients receive full tuition, academic fees, book and supply expenses (not room and board), and a \$100 per month subsistence allowance. High school seniors may apply for four-year scholarships, and cadets enrolled in the program may compete for three-year (starts in sophomore year), two-year (starts in junior year) and one-year (starts in senior year) scholarships. Information may be obtained from high school counselors, any Army ROTC professor of military science, or any Army installation. Recipients agree to a four-year active service obligation.

Non-Dickinson Students: Students pursuing a baccalaureate or advanced

degree program at Shippensburg State College, and the Capitol Campus of Penn State are eligible to cross-enroll in the Dickinson College ROTC program. Students at the Harrisburg Area Community College may also enroll in the program, but must complete baccalaureate degree program to receive a commission. These schools have registration or transfer procedures which allow full or partial credit toward graduation for military science courses taken through Dickinson. Contact this department for further information.

Departmental Courses:

101, 102. Introduction to Military Science (Leadership Laboratory) Instruction in individual skills and the foundation for more advanced laboratories. Meets one hour per week in each semester. (One unit of credit for physical education will be received for each semester successfully completed up to three semesters).

111. American Military History From colonial times to the present, with emphasis on the interrelationship of factors which contribute to the development and utilization of the U.S. Military. One-half course credit.

201, 202. Application of Military Science (Leadership Laboratory) Participation in operations and basic tactics to demonstrate leadership and management problems, and to illustrate various processes of resolution. Meets two hours per week in each semester. (One unit of credit for physical education will be received for each semester successfully completed up to three semesters).

211. Organization and Management Concepts of organization theory and the principles of management. Management and leadership relationships are investigated as they apply to the general theory and practice of the management functions of planning, organizing, staffing, direction, coordination, control, innovation and representation. One-half course credit.

MILITARY SCIENCE

301, 302. **Advanced Application of Military Science (Leadership Laboratory)** Emphasis on leadership. Situations require direct interaction with other cadets (students) and faculty members. The participants set well-defined goals and develop procedures for goal attainment. Meets two hours per week in each semester. (One unit of credit for physical education will be received for each semester successfully completed up to three semesters). *Prerequisite: open only to advanced course cadets.*

321. **Leadership and Management** Principles and techniques of effective leadership, methods of developing and improving managerial abilities and leadership qualities, and a basic understanding of interpersonal interactions. Use is made of recent developments in the administrative and the behavioral sciences to analyze the individual, group and situational aspects of leadership, and the management of resources. One course credit.

401, 402. **Command and Staff (Leadership Laboratory)** Emphasis is placed on developing planning and decision-making capabilities in the areas of military operations, logistics and administration. Meets two hours per week in each semester. (One unit of credit for physical education will be received for each semester successfully

completed up to three semesters). *Prerequisite: open only to Advanced Course cadets.*

431. **Contemporary Problems Seminar** Seminars in selected areas emphasizing the interplay of multifarious considerations in exploring the environment of the contemporary American scene, and the position of the United States in the world. Normally seminars will be offered in two major areas:

a. **Civil-Military Relations** — Examines the contemporary United States as it relates to the decision-making process affecting the U.S. military establishment. Emphasis is on the interdependence of military, social, legal, and ethical considerations in forming policies, as well as the interchange of influence, the military on society and society on the military. Normally, three problems are examined; these change by semester. Professors from other departments participate as discussion leaders. One course credit.

b. **Comparative National Security Policies** — Examines the national security policies and postures of the United States, Soviet Union, Peoples Republic of China, and selected other nations. Emphasis is placed on discovering (through independent study, discussion, and common readings) the features common to all major powers so their differences can be better understood. One course credit.

Music

Professors T. Bullard* and Gould

Associate Professors Petty and Posey, *Chairman*

Instructors in Applied Music — Brandon, Kendall, Krantz,
Losee, Martin, Mathews, and Park

Courses in music are offered in the belief that music is an essential aspect of man's personal, social, and cultural evolution, being a manifestation and reflection of the best thought throughout the ages. The art of music is considered in terms of its participation in the intellectual and spiritual life of man. Instruction in music is available both to students whose interest is of a general nature and to those who anticipate graduate or professional study. The offerings of the department are designed to enable students to follow a balanced and coordinated program of study in the basic disciplines of music through training in music theory, acquaintance with music's history and literature, performing experience through participation in vocal and instrumental ensembles, and individual instruction in applied music.

MUSIC

101, 102. History of Music An introductory course in music designed to train students in intelligent listening through discussion and analysis of selected representative works from plainsong through contemporary music. The primary objective of the course is to provide the student with such knowledge and understanding that may lead to an intelligent lifelong interest in music.

103. 20th Century Music A survey of the major trends in music during the 20th century. *Prerequisite: Music 101 or 102 or permission of the instructor.*

104. History of Opera A survey of operatic literature from its inception to the present. *Prerequisite: Music 101 or 102 or permission of the instructor.*

105. Instrumental Music A discussion of selected topics in instrumental music, e.g., symphonic literature, chamber music, and keyboard literature. The content of the course will be altered from year to year in order to provide a diversity of subject matter. *Prerequisite: Music 101 or 102 or permission of the instructor.*

106. Vocal Music A discussion of selected topics in vocal music, e.g., choral literature and history of the art song. The content of the course will be altered from year to year in order to provide a diversity of subject matter. *Prerequisite: Music 101 or 102 or permission of the instructor.*

107. Biographical Studies A study of the life and works of a major com-

*On leave 1979-1980

poser, e.g., Bach, Beethoven, Mozart, or Bartok. The content of the course will be altered from year to year in order to provide a diversity of subject matter. *Prerequisite: Music 101 or 102 or permission of the instructor.*

108. American Jazz A study of the roots of jazz in social, cultural and artistic dimensions followed by a chronological survey of the evolution of jazz styles from the late nineteenth century to the present. *Prerequisite: Music 101 or 102 or permission of the instructor.*

113-114. Applied Music Instruction I Open to all students who demonstrate by audition some acquaintance with musical notation, and who should continue to study instrument or voice at the basic level. *One-half or one course each semester. Placement by audition. Does not fulfill distribution requirements.*

125, 126. Theory of Music I An introduction to the basic materials of music by means of discussion, analysis, and written exercises, complemented by

intensive drill in sight singing, ear training, and keyboard harmony. Students are acquainted with some characteristic means of organizing these materials through firsthand contact with simple problems in melodic, contrapuntal, and harmonic techniques. *Prerequisite: permission of the instructor.*

213, 214. Applied Music Instruction II Open to students who demonstrate by audition a basic technique, and who should continue instruction on the intermediate level. *May be repeated for credit with the permission of the instructor. One-half or one course each semester. Placement by audition. Does not fulfill distribution requirements.*

245, 246. Theory of Music II Introduction to the basic materials of music continued. Evolution of chromatic harmony in the 19th century and selected techniques in 20th century music. Increased emphasis is placed upon stylistic and critical analysis. *Prerequisite: Music 126.*



313, 314. **Applied Music Instruction III** Open to students who demonstrate by audition a fully developed technical skill and who should continue study on the advanced level. *May be repeated for credit with the permission of the instructor. One-half or one course each semester. Placement by audition. Does not fulfill distribution requirements.*

351. **Seminar in Medieval and Renaissance Music** Study of the principal styles and forms of music from plain-song to ca. 1600. *Given in alternate years. Prerequisite: 126.*

352. **Seminar in Baroque Music** Study of the principal styles and forms of music from 1600 to 1750. *Given in alternate years. Prerequisite: 126.*

353. **Seminar in Classic and Romantic Music** Study of the principal styles and forms of music from ca. 1750 to ca. 1900. *Given in alternate years. Prerequisite: 126.*

354. **Seminar in 20th Century Music** Study of the principal styles and forms of music from ca. 1900 to the present. *Given in alternate years. Prerequisite: 126.*

413-414. **Repertory and Performance** The purpose of this course is to acquaint the advanced student with a broad selection of the repertory for his voice or instrument, and to prepare him to perform a program in spring semester which demonstrates his understanding of several musical periods and styles. *Prerequisite: Music 101 and 102, Music 313 and 314. Open to seniors with the permission of the music department upon recommendation of the instructor.*

495, 496. **Senior Seminar** Studies in composition, music history, and advanced theory, conducted through regular conferences and assigned writing. Open to seniors majoring in music who have demonstrated their ability to pursue independent research in at least two courses from this group:

351, 352, 353, 354. *Prerequisite: Permission of the chairman of the department.*

College Choir A mixed choir open through audition to everyone in the college community. Several major choral works are performed each year at Dickinson with the College-Community Orchestra. *Permission of the director required.*

Chamber Choir This select ensemble of 30 voices drawn from the College choir performs regularly in worship services at the college and travels widely to present secular and sacred music in major cities and colleges. *Permission of the director required.*

The Collegium Musicum A small, select group of singers and instrumentalists drawn from the student body, faculty, and community for the purpose of studying and performing masterpieces composed for small ensembles. *Permission of the director required.*

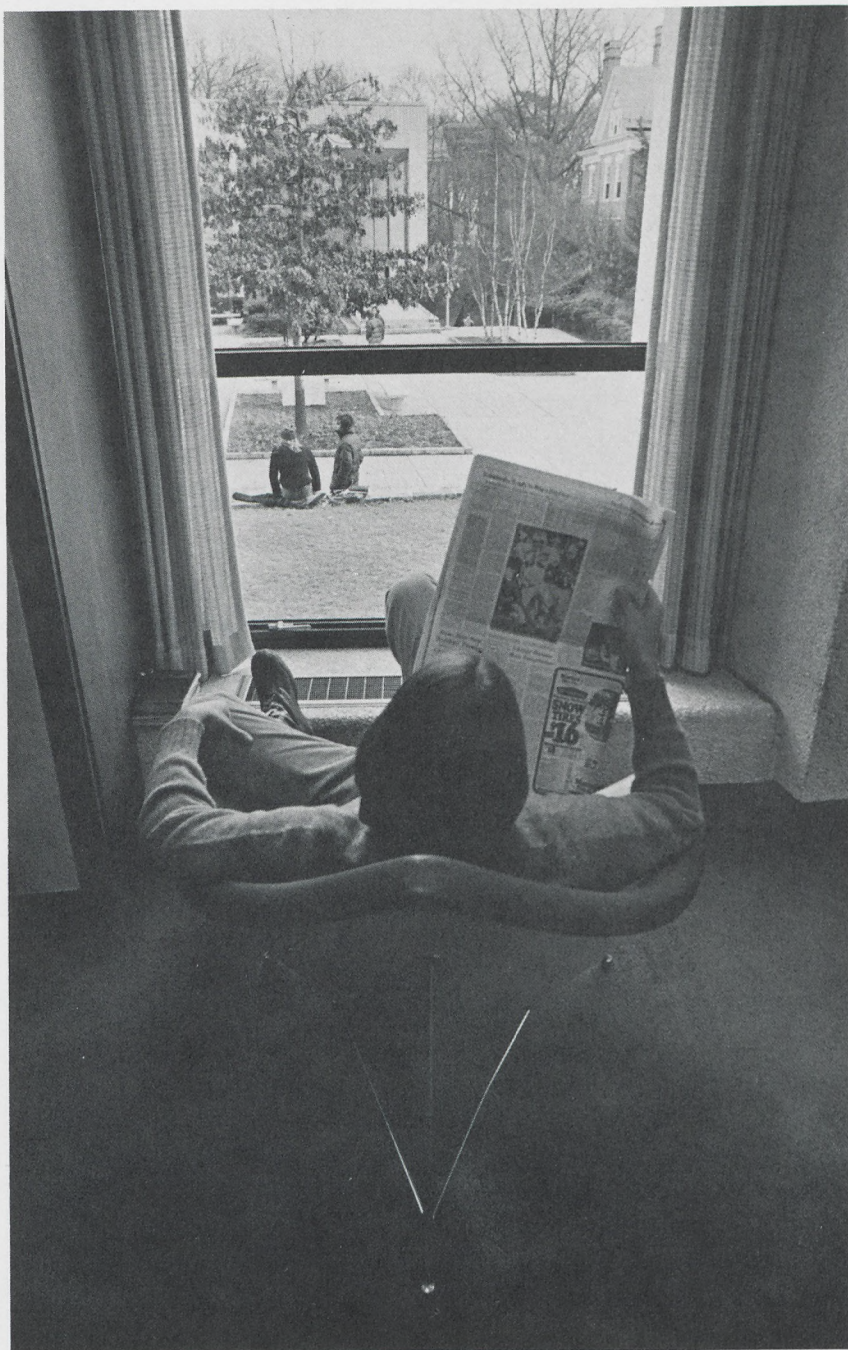
The College-Community Orchestra Open to students and faculty at the college and to instrumentalists from the surrounding area interested in the performance and study of the best in orchestral literature. *Permission of the director required.*

MAJOR: ten courses, including 101, 102, 125, 126, 245, 246, and four additional courses from the following group: 351, 352, 353, 354, 414, 495, 496, or an independent study approved by the department. Proficiency in piano is required.

MINOR: six courses, including 101, 102, 125, 126 and two additional courses from the following group: 245, 246, 351, 352, 353, and 354.

NOTE: Students planning to major in music should complete 125-126 during their sophomore year. A knowledge of French and German is necessary for graduate study in music.

MUSIC



Philosophy

Professors Allan and Ferré, *Chairman*
Associate Professors Dwiggins* and Krebs*
Assistant Professor Ellard

Courses in philosophy present ways of thinking about those fundamental questions which continue to puzzle us in spite of all our learning. What is it to be human? Can we justify our values? Is truth possible? Does history have a sense? Philosophers see questions like these cutting across the boundaries of science, art, politics, and religion, crucial to all these fields yet belonging to none of them, and challenging us to reflect on all our experiences and beliefs. Philosophy is this process of reflection.

PHILOSOPHY

Because it poses serious questions about ideas we take for granted, philosophy demands and creates a truly radical freedom of inquiry, and as such has always been at the center of liberal education. The philosophy program at Dickinson stresses a balanced approach to three main tasks: (1) understanding the sorts of questions philosophers ask, chiefly through analysis of primary sources; (2) critically evaluating the methods and ideas that have gone into the attempts to answer these questions; and (3) making the transition from criticism to original thought, where the questions have become truly one's own.

Recent graduates of the program have gone on to advanced studies in philosophy at such institutions as Harvard, University of Chicago, University of Texas, Vanderbilt, and Notre Dame. Among those graduating from 1965 to 1977, 29 of the 30 who applied were accepted in a philosophy program of their choice.

Lately, however, not as many majors have chosen to do graduate work in philosophy itself, chiefly because of the currently depressed job market for new college teachers in philosophy. On the other hand, because it couples rigor of thought with concern for all aspects of the human

*On leave 1979-1980.

condition, the study of philosophy has always been regarded an excellent foundation for a life in public service, education, law, medicine, policy-making, and other fields requiring a creative but critical approach to problem-solving. Typically over half the department's majors combine their philosophical studies with a major in another field.

The Program in Philosophy

Courses in the department are numbered according to the depth at which the subject is treated and the corresponding demands placed on the student:

- 100: introductory
- 200: intermediate
- 300: advanced (see the following paragraph)
- 400: seminar: advanced, special topic

Numbers *within* each level (e.g., 101, 102) do not indicate difficulty, but only grouping or sequence within a group. Current groupings appear below with the course descriptions.

With the exception of Philosophy 211 and 212, any 200-level course may be taken at the 300-level. Work at this level typically involves, over and above the regular course requirements, greater depth and breadth of reading, occasional tutorials with the instructor, and more frequent or more extensive writing. Precise requirements for 300-level credit in any one case are set by contract with the instructor during the add/drop period, and the course level changed by filing an add/drop form with the registrar. To qualify for 300-level work a student must have a previous 200-level course and approval of the department in each case.

The department encourages independent study and research. Students submit their proposals in writing for approval by the department at the beginning of each term. Since philosophy touches on so many other fields of study, the department also encourages double majors or other forms of

interdepartmental work, and strongly supports courses and programs which combine the perspectives of more than one discipline or which involve the comparison of different civilizational perspectives.

Introductory courses

101. Problems of Philosophy Introduction to philosophy through some of its central problems: in what sense we can be said to know anything or to be free, whether history has a goal, what things are truly worth doing or having. May be approached either by exploring each problem in turn or by analyzing the writings of several philosophers and seeing how different problems are dealt with in each. Primary sources.

102. Ethics The major theories in terms of which philosophers have tried to make sense of moral problems. The aims are to expand the student's range of ethical alternatives, to provide models and methods for thinking about moral dilemmas, and to help formulate and clarify one's own ethical position.

105. General Logic What it means to argue rigorously: the principles and methods of correct reasoning. Topics include deduction and induction; methods for identifying mistakes in reasoning; informal fallacies; use of Venn diagrams and truth tables; natural deduction systems; probability theory.

107. Introduction to Symbolic Logic Theory and practice in translating arguments into symbolic form and testing for validity by means of truth tables, natural deduction systems, and logistic systems. Propositional and predicate logics. Logic of relations. *Usually offered as a self-instructional tutorial.*

Philosophy in dialogue with other fields

201. Philosophy of Religion An attempt to understand the phenomena of religion and religions by the application of philosophic methods. Topics include: the possibility of intellectually responsible belief, the nature of religious knowledge, and the validity of religious language. *Prerequisite: sophomore standing or permission of the instructor.*

202. Philosophy of Art The struggle to answer the question: what is a work of art? Discussions of the nature of aesthetic experience and the meaning of literature and the arts in individual and cultural life. The work of art in Aristotle, Schopenhauer, Nietzsche, and Heidegger. Conversations with local and visiting writers and artists on specific problems. *Prerequisite: sophomore standing or permission of the instructor.*

203. Philosophy of Society The views of human nature, conceptions of morality, and theories of history which underlie contemporary conservative, liberal, and socialist thought. Intensive study of thinkers such as Locke, Burke, J. S. Mill, and Marx. *Prerequisite: sophomore standing or permission of the instructor.*

204. Philosophy of Science The meaning and implications of science in the contemporary world. Conceptual structures and methods used in scientific thinking; relations between the particular sciences; the logical character of scientific laws, theories, and presuppositions. More general questions about knowledge, values, and ultimate beliefs are also raised as appropriate to the procedures or findings of the sciences. *Prerequisite: sophomore standing or permission of the instructor.*

PHILOSOPHY



205. Philosophy of Law Fundamental issues concerning the nature of law. Topics may include: the justification of legal authority, the relationship between legality and morality, the nature of judicial decision-making, theories of punishment, and issues involved in civil disobedience. The approach is analytical rather than historical. *Prerequisite: sophomore standing or permission of the instructor.*

Historical development of philosophical thought

211. Ancient and Medieval Philosophy The origins of western philosophy. Topics include: the emergence of individual mind from mythic consciousness, Plato's myth of Logos, Aristotle's Logos of nature, individual consciousness in Hellenistic thought and in Plotinus, faith and philosophy from Augustine to Aquinas, nominalism and the Renaissance mind. Primary sources. *Prerequisite: sophomore standing or permission of the instructor.*

212. Philosophy in the 17th and 18th Centuries Europe's effort to come to terms intellectually with the new science and with the newly emerging bourgeois nations. The leading ideas in the century of genius and the age of enlightenment, with particular emphasis on the problems of attaining certain knowledge and a just society. Primary source materials from Descartes, Spinoza, Locke, Leibniz, Berkeley, Hume, and Kant. *Prerequisite: sophomore standing or permission of the instructor.*

213. Philosophy in the 19th Century The European tradition from 1789 to 1914: romanticism in philosophy, Hegel's exegesis of history, Feuerbach's transformed religion, revolution and redemption in Marx, individual salvation in Schopenhauer and Kierkegaard, and the Nietzschean critique of Europe. Additional topics may include: relations between British and continental thought; Darwin, Wagner, and Freud.

Prerequisite: junior standing or permission of the instructor.

214. Philosophy in the 20th Century Representative texts and movements that have given philosophy in this century its characteristic preoccupation with language. The Anglo-American (analytical) and continental (phenomenological-critical) traditions. Wittgenstein and Heidegger as seminal figures. The present situation. *Prerequisite: junior standing or permission of the instructor.*

215. American Philosophy Philosophies shaping and shaped by the beliefs and practices of the American peoples. Puritans, federalists and Jeffersonians, transcendentalists, Ohio and St. Louis Hegelians, social darwinists, pragmatists, process thinkers, and linguistic analysts. *Prerequisite: sophomore standing or permission of the instructor.*

217. Oriental Philosophy Characteristics and problems of thought outside the West. Methods of comparative philosophy. Close examination of works and movements within a major tradition (in different semesters: China, India, Japan, Buddhist schools). *Prerequisite: sophomore standing or permission of the instructor.*

Advanced studies in philosophy's main issues

221. Theories of Knowledge Conceptions of knowledge and its limits, and of the nature and possibility of truth. *Prerequisite: junior standing or permission of the instructor.*

222. Theories of Reality Conceptions of what is ultimately real, together with discussions of the nature and limitations of such conceptions. *Prerequisite: junior standing or permission of the instructor.*

223. Theories of Value Conceptions of the values which aesthetic, ethical, and religious phenomena are said to embody or express. The nature of value in general. Approaches to thinking about values. *Prerequisite: junior standing or permission of the instructor.*

224. Theories of History Speculative philosophies of history which have significantly influenced the shape of western thought: an analysis of their methods and conceptions, and an evaluation of their scope, function, and legitimacy. *Prerequisite: junior standing or permission of the instructor.*

Advanced studies of special topics

400. Seminar Recent topics have included: *Plato's Republic*, *World Models for the Future*, *Merleau-Ponty*, *Philosophical Issues in Anthropology*, *The Idea of Happiness*. *Prerequisite: Permission of the instructor.*

Occasional studies

Symposium Discussions of papers or topics of mutual interest, led by faculty members, students, or visiting speakers. Open to majors, and to others by invitation. *Non-credit.*

MAJOR: nine courses, including 105 or 107, 211, 212, and a minimum of four courses taken at the 300-level. The chairman may designate, for any given term, appropriate courses

in other departments or programs which can count, at the petition of the student, toward the major in philosophy. These courses will be listed each term in the Philosophy section of the Master Schedule.

To be accepted as a philosophy major a student must have a cumulative average of at least 2.0 and pass at least two courses in the department with an average of 2.0 or better for those courses. If the student declares a major with the minimum of two courses, the grade in each must be C or better.

Requirements for the major are fairly flexible, in order to allow a program adapted, with the aid of the adviser, to the individual's needs and interests. This is especially important for double majors. (Last year over half the department's majors combined philosophy with a major in another field.) Majors should complete the logic requirement (105 or 107) as soon as possible.

Declared majors have the right but not the obligation to participate with vote in deciding and implementing departmental policy. Voting majors must attend department meetings and assist in the business of the department when called upon to do so.

MINOR: six courses chosen with the advice of the department.

PHILOSOPHY

Physical Education

Associate Professors Barber, DuCharme, Gobrecht,
Seibert, and Watkins, *Chairman*

Assistant Professors McEvoy, Nickey,* and Wagner
Instructor Lehman

All fully matriculated Dickinson College students must satisfactorily complete three semesters (six units) of physical education. Transfer students with junior standing and with no physical education credit are required to take only two semesters (four units) of physical education. Students are expected to have completed the physical education requirement by the end of the first semester of their senior year.

A student enrolled in the physical education program may receive no more than two physical education credits for the same activity. In most activities students will be given the opportunity to take a physical education skills and knowledge achievement test. A student passing the test will be granted credit for that activity. A maximum of three physical education units may be satisfied by participation in intercollegiate athletics and/or military science leadership laboratory. Participation in a sport season or in a semester of leadership laboratory will receive one activity unit credit. Since the physical education requirement is designed to teach a diversity of lifetime activities, a student receiving intercollegiate athletic credit or military science credit must enroll in physical education activities that are different from his intercollegiate sports or leadership laboratory experience.

Every student must register for physical education. If there is a medical reason why the student cannot participate in physical education, the student must submit a medical excuse signed by the family doctor or one of the College doctors stating specific dates for the length of the excuse. Those students must register under the medical classification.

*On leave Spring 1980

All physical education activities offered to Dickinson College students are classified at two levels: beginning activities and advanced activities.

The beginning physical education activities offered by the department of physical education are listed below:

- A. Tennis
- B. Golf
- C. Archery
- *D. Volleyball
- E. Swimming
- F. Squash Racquets
- G. Bowling
- *H. Weight Training
- *I. Karate
- J. Skiing
- K. Badminton
- *L. Horseback Riding
- M. Gymnastics
- N. Racquetball
- O. Running & Jogging
- *P. Modern Dance
- *Q. Cycling
- *R. Aerobic Activities
- S. Ballet
- *T. Others upon formal request

The advanced physical education activities offered by the department of physical education are listed below. Any student who passes the beginning level physical education skills and knowledge achievement test in a specific activity may enroll in the advanced activity.

- *A. Tennis
- *B. Golf
- *C. Archery
- *D. Swimming
- *E. Squash Racquets
- *F. Karate
- *G. Skiing
- *H. Water Safety Instructor
- *I. Senior Life Saving
- *J. Intercollegiate Athletics
- *K. Modern Dance
- *L. Cycling
- *M. Others upon formal request
- *N. Horseback Riding

PHYSICAL EDUCATION



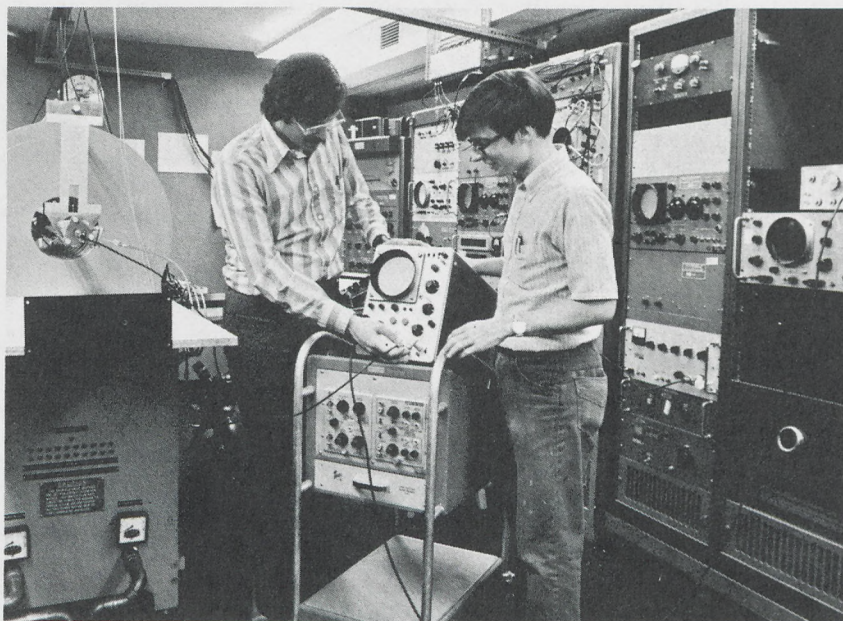
*Not granted credit by examination.

Physics and Astronomy

Professors K. Laws, P. Laws, and Long
Associate Professors Luetzelschwab, *Chairman*, Smith,
and Wolf
Assistant Professor Clements

The program in physics and astronomy serves students who desire intensive training in physical science, those who will use physics in allied fields, such as medicine, and those who are interested in the historical and cultural aspects of physics and astronomy. It aims to give the student an insight into the fundamental laws of nature and some facility in the mathematical language in which they are expressed. Students may major in physics as a preparation for further professional study in physics or engineering, or for careers in which a background in physical science is valuable. The combination of a strong and diverse academic program, modern laboratory equipment, and close personal contact with faculty involved in research prepares students for this wide range of careers. Some of our recent majors now have positions in physics research, high school and college teaching, electronics, optics, computer programming, planetarium directing and environmental resources management, urban planning and systems engineering. Others are completing graduate work in physics or allied fields such as biophysics, metallurgy, acoustics, meteorology, astronomy, nuclear engineering, health physics, medicine and law.

In addition to normal course work, the department encourages physics majors to pursue independent study or research with the guidance of a faculty advisor. Students have recently completed projects in Acoustics, Astrophotography, Health Physics, Holography, Lasers, Meteorology, Nuclear Radiation Physics, and Plasma Physics. Special equipment available for use in these projects includes sonic frequency analyzers, a 14" Celestron telescope, a heliostat, computer terminals, lasers and a



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holographic table, a weather station, multichannel analyzers, a thermoluminescent dosimeter, and magnetically-confined plasma discharge equipment. Besides classrooms and laboratories, Tome building houses a physics library, a machine shop, an electronics repair shop, and a well-equipped planetarium.

The department offers three introductory laboratory sequences: Physics 131, 132, Physics 111, 112 and Physics 109, 110. Physics 131, 132 is designed for all those students who enjoyed their high school physics course and wish to continue their study in depth. Prospective majors in physics and engineering should take Physics 131, 132 and Mathematics 131, 132 in their freshman year; physical science and mathematics majors should take these courses as soon as their schedule permits. Students who have taken advanced placement examinations should consult the chairman of the department regarding appropriate placement. Physics 111, 112 includes atomic and nuclear physics and is

primarily for life-science, premedical students and for non-science majors electing physics to satisfy the one-year laboratory science distribution requirement. Physics 109, 110 is recommended for students seeking a cultural, non-mathematical approach to astronomy.

102. Meteorology The physical basis of modern meteorology; characteristics of atmospheric motions, clouds, and weather systems; methods of weather observation and forecasting; meteorological aspects of air pollution. *Satisfies the one-course distribution requirement in Division III, but may not count toward a physics major. (See also Physics 202.)*

107, 108. Astronomy Introduction to the modern concepts of the physical nature of the astronomical universe. First semester: historical development of astronomical ideas and origin and evolution of the solar system. Second semester: cosmology and the structure and evolution of the stars

and galaxies. A terminal non-laboratory course for non-science students. Three hours classroom. 107 and 108 will not count toward major requirements on physics and will not satisfy the one-year laboratory science distribution requirement. Either course will, however, count as the third required course in Distribution III. Please read Note.

109, 110. **Astronomy** Similar to 107, 108 except that it includes one two-hour laboratory a week. This course sequence will not count towards major requirements in Physics. Please read Note.

*111, 112. **Elementary Physics** Introductory, non-calculus physics, principally for B.A., life science and pre-med students. Topics include mechanics, thermodynamics, acoustics, optics, electricity, magnetism and modern physics. Three hours classroom and one two-hour laboratory a week. Please read Note.

*131, 132. **General Physics** An introduction to classical mechanics, heat and waves in the first semester; emphasizes particle and rotational motion, the conservation laws of energy and momentum, and the laws of thermodynamics. Second semester: optics, electricity, circuit theory, magnetism and the properties of matter. Introduces and uses elementary calculus. Recommended for physical science and mathematics majors; a more analytical study than Physics 111, 112. Three hours classroom and one three-hour laboratory a week. *Prerequisite: Mathematics 131, 132 or concurrent registration therein. Please read Note.*

202. **Meteorology** The physical basis of modern meteorology: characteristics of atmospheric motions, clouds, and weather systems; methods of weather observation and forecasting; meteorological aspects of air pollution. Some of the basic concepts and techniques of introductory physics will be used to solve problems in meteorology. This

course may count toward a physics major. *Prerequisite: Physics 111 or 131.*

206. **Topics in Astronomy** Physical and mathematical aspects of astronomy. Topics will be selected from the following: comparative planetology, stellar evolution, cosmology, or observational astronomy (using the 14-inch Celestron telescope or the solar heliostat). *Prerequisite: 112 or 132; Mathematics 132.*

231. **Modern Physics** Special relativity, atomic, nuclear and solid state physics. Topics include atomic structure and its relationship to the quantum nature of light and matter; nuclear structure and interactions; and elementary particles. *Prerequisite: 112 or 132.*

232. **The Physics of Waves** A study of the motion of waves and vibrating systems. Resonance phenomena, coupled oscillation, superpositions, and interference. Wave theory will be used to describe various phenomena in fluids, acoustics, optics, mechanics, and modern physics. *Prerequisite: Physics 112 or 132; Mathematics 132.*

235. **Modern Physics Laboratory** Experiments in atomic and nuclear physics. Emphasizing alpha, beta, and gamma particle detection techniques, gamma spectrometry, and half-life measurements. Three hours laboratory a week. *Prerequisite: 231 or concurrent registration therein. One-half course.*

236. **Modern Optics and Acoustics Laboratory** Experiments involving resonance or wave phenomena in such fields as fluid mechanics, acoustics, modern optics and holography, with the use of lasers, microwaves, spectroscopy and photography. Four hours laboratory a week. *Prerequisite: 232 or concurrent registration therein. One-half course.*

*311, 312. **Analytical Mechanics and Wave Motion** Statics and dynamics: motion of a particle in one, two and

three dimensions; systems of particles, rigid body motion, moving coordinate systems, wave propagation, fluid flow, Lagrange's equations, tensors, and small vibrations. *Prerequisite: 232; Mathematics 244, or permission of the instructor.*

***331, 332. Electricity and Magnetism** Principles and applications of electricity and magnetism using vector calculus. First semester: basic properties of the electromagnetic field, interaction of the field with charges and currents; dielectric and magnetic media. Second semester: solutions of Maxwell's equations in matter and free space, reflection and refraction of waves, guided waves; topics in plasma physics and special relativity. Laboratory work as appropriate in 332. *Prerequisite: 232; Mathematics 244.*

***341, 342. Mathematical Physics** Analytical and numerical techniques for the mathematical analysis of physical phenomena. Topics include advanced vector analysis and matrix methods, techniques for solving ordinary and partial differential equations used in physics, the solution of boundary value problems, the properties and use of functions of a complex variable, Green's functions, Legendre Polynomials and Bessel Functions. *Prerequisite: 132; Mathematics 244.*

351. Experimental Physics Circuit analysis, electronic devices and machine shop techniques. A study of dc, ac, and electronic circuits; the physical principles of vacuum tubes, diodes, transistors and solid state integrated circuits, including operational amplifiers. The laboratory utilizes modern electronic equipment. A small machine shop project is required. Three hours classroom and one four-hour laboratory a week. *Prerequisite: 112 or 132; Mathematics 132.*

361. Topics in Modern Physics Topics selected from atomic, nuclear, plasma, or solid state physics; health physics;

or modern optics and acoustics. *Prerequisite: 231; Mathematics 244.*

Health Physics

Health Physics is the field of study concerned with radiological safety in nuclear power plants, hospital x-ray and radiation facilities, and any institution that uses radioactive material for research.

The Dickinson physics and astronomy department offers the following courses and laboratories in Health Physics listed under Topics in Physics (Physics 361). These courses are self-directed study programs, not lecture courses. The student completes weekly reading and problem assignments and meets once a week with the advising faculty member to discuss the week's assignments and take the assigned examinations.

HEALTH PHYSICS I

Basics of nuclear physics and its application to health physics. Topics include nuclear binding energy, nuclear models, radioactive decay, alpha, beta, and gamma decay, decay schemes, interaction of radiation with matter, and radiation dose measurement.

HEALTH PHYSICS II

Basics of health physics. Topics include biological effects of radiation, instrumentation, internal and external protection, internal and external dose calculations, licensing, waste disposal, public exposure, and radiological monitoring.

INTRODUCTORY NUCLEAR AND HEALTH PHYSICS LABORATORY (One-half course)

Basics of nuclear and health physics instrumentation. The topics include pulse counting, use of a multichannel analyzer, alpha, beta, and gamma detection, TLD dose measurements, and counting statistics.

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INTRODUCTORY NUCLEAR AND HEALTH PHYSICS LABORATORY
(One-half course)

Laboratory experiments in specific types of health physics measurements; including neutron activation, environmental radiation detection, decontamination, and shielding.

Three other courses (one-half course credit each) are available on Environmental Health Physics, Medical Health Physics, and Nuclear Power Plant Health Physics. A student can also do independent research and possibly have an internship in health physics at a nearby nuclear facility.

362. Thermodynamics and Statistical Mechanics Classical and quantum statistical mechanics and thermodynamics with applications to the solid state and other physical systems. *Prerequisite: 232, Mathematics 244, or permission of the instructor.*

392. Physics Seminar Student reports and discussions on several topics in contemporary physics. Emphasis is on the development of bibliographic skill, seminar presentation and report-writing techniques, as well as increasing the breadth and depth of the student's knowledge of recent research. *Prerequisite: 232 and permission of the instructor. One-half course.*

431, 432. Topics in Theoretical Physics Topics to be selected from the following areas: advanced dynamics, special and general relativity, applications of quantum mechanics to atomic, nuclear, and solid state physics. *Prerequisite: 311, 341, or permission of the instructor.*

461. Problems in Contemporary Physics Integration of the principles of physics with applications. Late 19th century electromagnetic theory and the development of relativity. Force and mass, time and temperature, gravitation and black holes. The thermodynamics of solar energy. Laboratory work in vacuum technol-

ogy. Field trips to graduate school, industrial and government research laboratories. *Prerequisite: Student must be a senior physics major, or permission of the instructor.*

NOTE: Because of similarity in course content, students will not receive graduation credit for both of the following pairs of courses: 102 and 202, or 107 and 109, or 108 and 110, or 111 and 131, or 112 and 132.

MAJOR: Those planning to major in physics, in consultation with the department, will devise a program tailored to their preparation, interests, and goals. Each student is expected to acquire a basic knowledge of classical and modern physics, and mathematical physics. Courses normally required of the major include: 231, 232, 311, 331, 341, 461, and an additional laboratory course. Students pursuing special programs of study within the department may replace some of these courses, with approval of the chairman, but a minimum of nine physics courses is required. Possible programs of study include: Astrophysics, Biophysics, Chemical Physics, Geophysics, Health Physics, Mathematical Physics, Meteorology, Preengineering, Secondary School Teaching.

MINOR: six courses including 111, 112 (or 131, 132), 231, and three additional courses in the department.

Political Science

Professors Andrews, Flaherty, Nilsson, and Rosi, *Chairman*
Assistant Professors, Friedman, McDowell and Ruhl

The department of political science analyzes political systems, processes and actors. Theoretical, empirical, historical and normative methods are used. The mastery of facts, examination of values, sharpening of analytical habits, and the formulation of considered views are goals for our staff and students.

For political scientists, "power" is a key word: the power of political systems (both here and elsewhere) in the context of economic systems, legal systems and social systems. Political science is one of the social sciences; yet, various staff members have skills and interests beyond these: from humanistic concerns for values to mathematical tools for quantitative research.

Our staff has graduate degrees from Columbia, Cornell, Johns Hopkins, the Maxwell School of Syracuse University, and Yale Universities. They have numerous academic responsibilities outside our department: International Studies, Russian and Soviet Area Studies, Latin-American Studies, Comparative Civilizations, the Bologna Program, THUS (The Harrisburg Urban Semester), and the Washington Semester Program.

Majors go on to law school, graduate school, local, state, national or international governmental service, journalism and business.

POLITICAL
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201. Introduction to Political Philosophy An introduction to the history of Western thought on the problems of the possibility of knowing political justice and creating a just polity. Major texts from the tradition will be discussed. *Required of all Track 1 majors.*

211. American Government A basic introductory course in American federal government which emphasizes its structure and operation, as well as modern methods of analysis. Special attention is given to the executive, legislative, and judicial processes. *Required of all Track 1 majors.*

230. The City Major concerns are the city as a frontier, the city as people, the city as plan, problems of urban politics, problems of society.

240. International Relations The distribution of power among nations, the components of that power, the tools available for its pursuit and the use made of them are the major divisions of this course. *Required of all Track 1 majors.*

243. Policy Making in State and Local Governments An analysis of state and local governments with particular emphasis on the exertion and distribution of political power and on the influence of bureaucracies in policy making. Attention is given to political pressures and bureaucratic constraints experienced by policy makers in such areas as criminal justice, corporate regulation, poverty relief, and urban growth and planning.

290. Polimetrics and Research Philosophy and research methodology of behavioral political science. The course briefly examines the assumptions and procedures of natural science and discusses their relevance to the contemporary study of political phenomena. During the balance of the course students learn to use quantitative techniques of political analysis such as survey research (polling) and aggregate data analysis by participating

in original group research projects. No prior knowledge of statistics is necessary. Especially recommended for prospective graduate students in the social sciences.

335. Public Administration An analysis of the organization and functioning of the national bureaucracy in a democratic society. Special attention is given to presidential management, theories of organization, independent regulatory agencies and bureaucratic pathology, financial and personnel administration, and administrative responsibility. *Prerequisite: 211 or permission of the instructor.*

341. American Political Thought The development of political ideas in America, stressing foreign influences on early colonial thought and those influences indigenous to the growth of American democracy. Colonial political ideas, the development of the Constitution, the Federalist Papers, states' rights philosophy versus centralized government and contemporary interpretations are other questions dealt with. *Prerequisite: an introductory course in political theory or permission of the instructor: History 217, 218 is recommended.*

345. Constitutional Law I An analysis of the Constitution as the fulcrum of the political system and as the ultimate legitimizing instrument available to political forces competing to adapt the legal order to their fundamental needs. The major focus is on the Supreme Court's role in defining the powers of the three branches of the federal government. The period before 1937 is emphasized. *Prerequisite: 211 or permission of the instructor.*

346. Constitutional Law II Stresses trends and developments in civil liberties, with particular emphasis on the Supreme Court's interpretation and application of the "equal protection" and "due process" clauses of the Fourteenth Amendment from the early 1950s to the present. Individually-

selected special topics will be used as an integral part of the course. *Prerequisite: 211 or permission of the instructor.*

347. Comparative Political Modernization The study of theories which analyze alternative responses to the breakdown of traditional authority when faced by pressures to "modernize." The theories are tested against the experiences of selected developing regions.

348. Asian Governments and Politics Comparison of the People's Republic of China, India and Japan: ecology, traditional cultural themes, the great issues of politics, the modernization process, international relations.

350. Marxist Political Thought An examination of the political philosophy of Karl Marx, Lenin, Trotsky, and others within the tradition of Marxist scholarship and politics. *Prerequisite: Political Science 201 or permission of the instructor.*

354. Recent Political Thought An introduction to the political thought of the Twentieth Century focusing on the works of Weber, Freud, Dewey, Strauss and others. *Prerequisite: 201 or permission of the instructor.*

355. Political Behavior Cultural, social, and psychological factors which contribute to forms and directions of political behavior. Special attention is given to American voting behavior, ethnic political behavior, and personality influences on politics. Field surveys are undertaken to illustrate contemporary trends. *Prerequisite: 211 or permission of the instructor.*

356. Public Opinion and Propaganda The nature, formation, and manipulation of public opinion in a democratic society. Included are an analysis of mass communication (press, television, and film) from the McLuhan and behavioral perspectives, propaganda techniques and effects in both demo-

cratic and authoritarian societies, and problems of public opinion polling. *Prerequisite: 211 or permission of the instructor.*

357. Political Parties and Interest Groups A study of the functions structures, and operations of American political parties and interest groups. Special attention is given to the techniques of running a campaign for office, to the role of the media in superceding American parties, and to the interactions of government with the two largest "interest groups": business and labor. *Prerequisite: 211 or permission of the instructor.*

358. The Legislative Process An analysis of the legislative branch of government, especially the national Congress. Emphasis is placed upon the legislature as a social system, the decision-making process, the interrelationships with the political parties and interest groups, the executive and the judiciary. *Prerequisite: 211 or permission of the instructor.*

359. The American Presidency An in-depth analysis of the nature and significance of "the Man" and "the Office," including constitutional development, presidential roles and customs, the recruitment process, the executive branch, and the politics of the presidency. *Prerequisite: 211 or permission of the instructor.*

360. Comparative Political Systems European parliamentary institutions analyzed as alternative liberal-democratic systems. Particular attention is paid to the British Cabinet form, the French Presidential form, the Italian Coalition form, and to the German Federal form.

361. Comparative Legal Systems An introduction to the major modern "families of law" and their theoretical premises, emphasizing the relationship among legal systems, social values and systems of politics. *Political Science 360 is recommended.*

POLITICAL SCIENCE

363. The Black Experience A survey course analyzing the experience of black people in the American political system. Contemporary political issues confronting the black community will be discussed in the light of its history and the nature of the American political system. Organized around the central question: Is black equality possible within the confines of the American political system as it is currently organized? *Given in alternate years.*

366. Soviet and East European Politics An analysis of the development, structure and issues of Soviet and East European politics.

370. Formulation of American Foreign Policy An analysis of the methods by which foreign policy is formulated and executed as well as the study of American programs and problems in the major areas of the world. Policies concerning disarmament, economic and military aid, and the United Nations are also considered. *Prerequisite: 240 or permission of the instructor.*

375. American National Security Policy Analysis of formulation and implementation of American national security policy within the context of American society and the international system. National security will not be considered simply in a military/strategic sense but as connoting the preservation of the core values of a society. *Prerequisite: 240 or 211 or permission of the instructor.*

390. Selected Topics in Political Science Topics not normally studied in depth in the foregoing course offerings are analyzed in this special topics class. At the discretion of the department, a 390 Selected Topics class using seminar research procedures may be accepted as the equivalent of a 490 seminar. *Open to sophomore, junior and senior majors and to others by invitation.*

395, 396. Studies in Modern European Politics To be offered only in Bologna.

490. Seminar A seminar in selected topics in political science. *Open to sophomore, junior and senior majors and to others by invitation.*

MAJOR: Three tracks are available to the political science major.

Track 1 is made up of nine courses including 201, 211, 240 and a 490 seminar. The introductory courses in the fields of theory, American government and foreign government and international relations are prerequisites to advanced work in those component fields.

Track 2 allows the major to select any nine courses (including a 490 seminar) with the approval of two departmental advisors.

Track 3 is the tutorial major meant for the clearly superior student who is interested in acquiring a comprehensive familiarity with the literature of the field of Political Science.

MINOR: six courses.

TUTORIAL MAJOR: The student works primarily under the guidance of one member of the department by mutual agreement. Together, they devise a program of study which involves, minimally, regular meetings for the writing of essays and papers and for discussion. The fields of political science to be dealt with are agreed upon by the department in conjunction with the tutor and the student at the time the program is initiated.

Normally the program begins no sooner than the student's third semester.

There is no interference with College distribution requirements or with taking non-political science courses.

The student is free to take one or some courses in political science; to take them as audits, pass/fail,

or for a letter grade. The only specific political science course requirement in this major is a 490 seminar in order that the student have the experience of working with his peers on a jointly researched topic.

The student portfolio will contain samples of essays and other work and evaluations by the tutor and by other instructors as appropriate.

In the spring semester of the senior year, the student is required to sit for a comprehensive examination in both written and oral form to be administered by the department. The examination will deal with the fields of political science alluded to above. Changes in the fields to be included may be made with departmental approval up to and including the seventh semester. Normally, one-quarter of the final semester is given over to preparation for this comprehensive examination.

One reexamination in one or more fields may be permitted within the calendar year.

The grade assigned will be pass, fail or pass with departmental honors.

PASS/FAIL Options for Majors (Please also see page 158).

Track 1 majors: With the exception of 201, 211, 240 and 490, any three major courses may be taken pass/fail.

Track 2 majors: With the exception of 490, any three major courses may be taken pass/fail.

Track 3 majors: The comprehensive nature of the tutorial enables the tutor and the student to plan a program following the College pass/fail requirements.

NOTE 1: Track 3 is available to members of the Class of 1977 and succeeding classes.

NOTE 2: Majors may apply to spend one semester of their junior year in Washington, D.C. in the Washington Semester at American University specializing in domestic political studies. Majors may also apply to spend their sophomore, or junior year in Bologna, Italy as participants in the Bologna Program specializing in European studies and international affairs.

POLITICAL
SCIENCE

Psychology and Education

Professors Coslett and Wanner, *Chairman*

Associate Professors Engberg* and Hartman

Assistant Professors Cavenagh, D'Lamater, Fenner, Major,
and Robertson

Psychology

The emphasis of the psychology program at Dickinson is the accommodation of the individual patterns of interest and objectives of the students enrolled. The curriculum includes general lecture courses to familiarize the student with major areas of psychology and courses emphasizing discussion and active student involvement. These latter courses include both laboratory and field experience under critical supervision. Their purpose is to permit the student to acquire the viewpoint of the discipline through the application of its theories and methods.

Students are encouraged to think through their purposes for choosing psychology as a major and to seek advice from a department member early in their program.

Effective July 1, 1977 students may apply to declare a major in Psychology when they have completed:

Psychology 111, Introduction to Psychology
220, Experimental Analysis of Behavior
221, Research Design and Statistical
Evaluation

The student must attain a grade of "C" or better in each of these courses.

*On leave half-time 1979-1980.

111. Introduction to Psychology A survey of areas of contemporary psychological study to acquaint students with viewpoints, findings, and techniques of investigation of the discipline. In this self-paced course students complete a required series of self-study unit assignments, tests, and interviews.

140. Social Psychology A survey of major current theories of social behavior and relevant findings of field and laboratory studies. Is available to and appropriate for any undergraduate student.

141. Social Psychology of Personality Post-Freudian theory of personality as it appears in the common social transactions between one human being and another. The contributions of Harris, Steiner, and especially Berne are closely reviewed. Classroom discussion is emphasized. *Prerequisite: 140.*

220. Experimental Analysis of Behavior An introduction to operant conditioning in particular and to psychological experimentation and inference in general. The self-paced course has 20 unit tests, individual conferences, and five laboratory experiments. *Prerequisite: 111.*

221. Research Design and Statistical Evaluation An examination of statistical and non-statistical methods as they relate to the design and evaluation of experiments in the field of psychology. Extensive experience with practical applications will augment the instruction. *Prerequisite: 111.*

231. Educational Psychology Also called Education 231. Psychological principles and practices related to problems of classroom instruction. This course has greatest relevance for students who intend careers in teaching. *Prerequisite: 111 and Education 221.*

232. Personality Psychology A survey of major current theories of personality and relevant empirical and clinical literature. Is available to and appropriate for any undergraduate student.

237. Developmental Psychology A survey of contemporary findings, principles, and observational methodology of human development. Field work with children supplements the academic activities. *Prerequisite: 111.*

276. Abnormal Psychology An introduction to various mental illnesses and techniques of diagnosis and treatment. Relevant for students who anticipate careers in medicine, law, and the various areas of social and psychological service. *Prerequisite: 111.*

320. Experimental General Psychology Explores problems of the design, conduct, and analysis of research in human learning, perceptual-cognitive processes, and related areas. Students perform, and prepare written reports of, experiments which exemplify methodological problems normally encountered in such research. Three hours of classroom and three hours of laboratory a week. *Prerequisite: 220 and 221.*

321. Advanced Experimental Conditioning Developing critical skills in relating psychological theory to empirical data. Advanced problems in animal learning, and the stimulus control of behavior are explored. Three hours class and extensive independent laboratory research. *Prerequisite: 220 and 221.*

326. Physiological Psychology A review of the structure and function of the nervous system as variables in behavior and the psychological processes. Three hours classroom and four hours laboratory a week. *Prerequisite: 220 and 221.*

338. Experimental Child Psychology A survey of comprehensive theories of human development and of contemporary research emphases of developmental psychologists. Students perform and prepare written reports of empirical studies of developmental phenomena. Three hours of classroom and three hours of laboratory a week. *Prerequisite: 220, 221, and 237.*

339. Principles of Counseling Review of theories and techniques of counseling as applied to educational, vocational, and personal problems. *Prerequisite: 111.*

361. Introduction to Clinical Psychology An overview of clinical psychology as an academic discipline and as a professional art which includes the behavioral problems encountered along with procedures for their diagnosis and treatment. Relevant to those students seeking careers in the various areas of social and psychological service. *Prerequisite: 220, 221, and permission of the instructor.*

376. Junior Seminar Reading in, review of, and discussion about selected topics of current importance in the discipline. *Prerequisite: Permission of the instructor.*

430. Psychology of Religion Examines psychologists' understanding of those social institutions and individual experiences which man has described as religious. *Prerequisite: senior status in either psychology or religion.*

451. History of Psychology Examination of interrelationships among thoughts, theories, and empirical findings that contributed to the emergence of the discipline of psychology and that have influenced its development. Important for psychology majors and relevant for advanced undergraduates who are competent in seeking relationships among the developments of thought and practice. *Prerequisite: Permission of the instructor.*

461. Psychological Testing The use of psychological tests and observational procedures in the assessment of the behavioral organization of individuals. Supervised field work supplements the lectures and discussion. *Prerequisite: 132 or 276, 237, 361, and permission of the instructor.*

471. Systematic Psychology I An advanced course, for students with a strong background in experimental psychology, which studies the major learning theories of the twentieth century. *Prerequisite: Permission of the instructor.*

481, 482. Senior Seminar Readings in, reports of, discussion about, and critical examination of issues or problems central in present day psychology. *Prerequisite: Permission of the instructor.*

Psychology Internship A program reserved to those students who have applied themselves in the undergraduate offerings relevant to those aspiring to social or psychological careers of human service. Prospective enrollees in this course must satisfy the Committee on Off-Campus Study as well as meet the department's expectations. *Prerequisites: 361 and permission of the department chairman.*

MAJOR: Effective July 1, 1978, Ten courses, including 111, 220, 221 and any course from the 320 to 338 set of advanced laboratory courses. All students, including transfers are expected to take a minimum of five courses in the department, of which four must be at the 300/400 level. Only one course credit in internship may be applied toward the major.

MINOR: Effective July 1, 1978, Six courses, including 111 and 220. Four courses must be taken in the department.

Education

Assistant Professor D'Lamater, *Director*

The teacher education program consists of (1) basic coursework, and (2) the professional semester in teacher education. Certification programs include biology, chemistry, earth and space science, English, environmental education, French, German, Greek, Italian, Latin, mathematics, physics, social studies, and Spanish. Basic coursework consists of the following courses:

Psy. 111 — Introduction to Psychology

Ed. 221 — Social Foundations of Education

Psy. 231 — Educational Psychology (Prerequisites:
Ed. 221, Psy. 111)

EDUCATION

These basic courses are prerequisites for filing application for admission to the professional semester. They are normally scheduled during the first two years of study.

In the fall semester of the junior year, teacher education candidates make *formal* application to the department of education for admission to the Professional Semester in Teacher Education, either for the fall or spring semester of the senior year. Applications should be returned to the director of teacher education.

The professional semester consists of block-scheduled, concentrated professional education courses, seminars, and clinical workshops, and full-time observation and supervised student teaching in a nearby, cooperating public school system. These account for four course credits and no other courses are to be taken. The semester includes:

First half of semester:

Ed. 433 — Educational Principles,
Curriculum and Special Methods
in Subject Areas

Ed. 443 — Educational Evaluation
(one-half course)

Ed. 451 — The Use of Instructional
Media (one-half course)

Second half of semester:

Ed. 461-462 — Observation and
Supervised Student Teaching

221. Social Foundations of Education

Emphasis is on the role of the school in the social setting, the functions of schools in a changing society, community influences upon education, and the teacher's role in community and school. Several philosophical writings are examined as they relate

to the historic development of the American secondary school program.

231. Educational Psychology See Psychology 231.

433. Educational Principles, Curriculum, and Special Methods in Subject Areas Instruction in the planning, organizing, and conducting of instructional activities; in the developing of effective class management procedures; in the application of innovative pedagogical techniques; and in effectively using curricular materials and evaluative instruments. Considerable time is devoted to the specialized field in which certification is sought. *Prerequisite: 221, 231, and admission to the professional semester.*

443. Educational Evaluation An introduction to evaluation principles and techniques focusing upon both teacher-constructed tests and standardized measurement instruments including testing terminology, types of instruments, selection procedures, and techniques for administering, scoring, tabulating, and interpreting test data. *Prerequisite: 221, 231, and admission to the professional semester. One-half course.*

451. The Use of Instructional Media A survey of all devices, techniques, and media available to today's educator. Attention is given to research findings and to projected developments. Students are required to prepare materials and gain experience with many media in clinical workshop sessions. *One-half course.*

461-462. Supervised Student Teaching and Observation Observation and supervised student teaching is done at nearby cooperating public secondary schools in the student's area of specialization on a full-time basis for eight weeks. This field experience is under the direction of college and public school advisory personnel.

Seminars in teacher education are conducted by the director of teacher education, who is responsible for assignments. Travel and personal expenses incurred are the responsibility of the student. *Prerequisite: 221, 231, admission to the professional semester, and successful demonstration of necessary teaching competencies in 433, 443, and 451. There is a laboratory fee of \$35.*

MAJOR: This department does not offer a major in education. The student preparing to teach completes a major in another department of the College.

MINOR: six courses.

NOTE: Dickinson College students are eligible for elementary school certification through a cooperative program with Gettysburg College. See the director of teacher education for details.



Public Speaking

The courses in public speaking are directed toward improvement in verbal communication and toward the development of greater self-assurance and ease in social and professional situations.

225. Argumentation and Debate The logic and strategy of debate. Group discussion techniques. Participation in debate. *Prerequisite:* 325.

325. Public Speaking The theory of and practice in the fundamentals of public speaking.

PUBLIC
SPEAKING



Religion

Professors D. Bechtel, *Chairman*, Booth, and Slotten
Associate Professors Krebs* and Rosenbaum
Assistant Professor Escovitz

The curriculum is designed to investigate the history, nature and implications of the manifold phenomena of human possibility and realization under the aspect of the sacred. The study of religion, therefore, includes historical, phenomenological, theological, textual, and related scholarly approaches.

On the one hand, the curriculum is organized around the study of selected religious traditions; on the other hand, it is organized around the investigation of religious experience that cannot be subsumed under the category of any particular tradition, including the religious aspects of secularity.

The study of religion invites an understanding, appropriate to the liberally educated person, of a vital dimension of human activity and sensibility and an informing background for graduate or professional education in the humanities and social sciences (e.g., medicine, law, education, public services).

For courses numbered 201, 202, 203, 207, 208, 209, 211, 220, detailed titles and descriptions will be published in April of each year to specify the course contents for the whole of the following academic year, with a tentative second-year schedule.

Any student with a previous 200 level course may contract by add/drop time to constitute any enrolled 200 course (except Religion 204, 205) a 300 tutorially advanced course (the latter to involve regular additional discussions with the instructor, greater specialization in course papers, further reading). The full department must approve such requests before such contract and certification.

*On leave 1979-1980.

A. Cross-Traditional and
Methodological Courses

100. Religion in the Ancient Mediterranean World An introduction to the study of religion (methodology, problematics) by way of a comparative survey of the religious traditions of the Egyptians, Sumerians, and ancient Semitic and Indo-European speaking peoples, such as the Hebrews and Arabs; the Greeks, Romans, and Indo-Iranians.

120. Religion in South Asia An introduction to the formative role of religious consciousness in the development of the cultures of India.

130. Religion in East Asia An introduction to the formative role of religious consciousness in the development of the cultures of China and Japan.

220. Topics in the History of Religions (in different semesters: Primitive and Archaic Religion; Myth and Ritual; Mysticism and Religious Tradition; The Theomorphology of J. R. R. Tolkien; other). Specialized studies with methodological implications. *Normal prerequisites: 100, 120, or 130 as appropriate to topic, or permission of the instructor.*

B. The Religious Traditions

Various Traditions

201. Traditions in the History of Religions (in different semesters: Puranic Hinduism; Islam; Taoism; Confucianism; Celtic and Nordic Religion and Mythology; other). Specialized historical textual, and phenomenological studies. *Normal prerequisites: 100, 120, or 130 as appropriate to topic, or permission of the instructor.*

Buddhism

(120 and 130 will be appropriate for students interested in the antecedents of Buddhism.)

202. Studies in the Buddhist Tradition (in different semesters: Theravada;

Mahayana; Zen; Tantra; other). Historical, phenomenological, and textual studies of the thought systems, practices, and cultural interactions of the major subtraditions of Buddhism. *Normal prerequisites: 100, 120, or 130 as appropriate to topic, or permission of the instructor.*

Judaism

103. Torah, Prophets, and Writings (The Old Testament) A critical examination and attempt to understand the literary deposit and the antecedent traditions remembered and formulated by the Ancient Israelites in encounter with their God, with other gods, and with the history and culture of the Ancient Near East. This literature known as The Old Testament to Christians is interpreted in the contexts of the times in which it was written and the ideas current in those times.

203. Studies in the Hebrew Tradition Critical examination and discussion of selected topics dealing with Ancient Israel, the surrounding cultures, and Old Testament concepts and literature. (In different semesters: The Prophetic Faith; Wisdom in Israel and the Ancient Near East; Sacred Story, Temple & Cultus; other). *Normal prerequisites: 100 or 103, as appropriate to topic, or permission of the instructor.*

204, 205. The History of the Jews A survey of the history of the Jewish People from ca. 445 B.C.E. to 1786 C.E. Two semesters: 204. Ezra to Islam: Hellenism. "Normative Judaism", Christianity. 205. Muhammad to Mendelssohn: Islam, Crusades, Jewish Philosophy, Reformation, Enlightenment. *Normally offered in alternate years.*

206. Studies in the Jewish Tradition (in different semesters: Introduction to Talmud: a general study of the growth, nature and content of Halakhic and Midrashic material; Modern Jewish Thought: 19th and 20th century Jewish

RELIGION

responses to the problems attendant upon "emancipation," emphasis on Buber, Heschel, Rosenzweig, other.) *Normal prerequisites: 103 or 204, 205 as appropriate to topic, or permission of the instructor.*

Christianity

(103 and 204 will be appropriate for students interested in the antecedents of Christianity.)

107. The New Testament A critical examination and attempt to understand the New Testament as the written traditions which articulated the faith, expectations, and actions of the early Christians as they responded within Jewish and Greek culture to the historical events of their day, and especially as they responded to the life and death of Jesus of Nazareth.

207. Topics in New Testament Study A critical examination and discussion of selected issues. (In different terms: The Portrayal of Jesus in Traditions and History; New Testament Theology: Paul, John, Hebrews; Eschatology and Ethics in the New Testament; Christ, Cosmos, and History; other). *Normal prerequisites: 100 or 107, or permission of the instructor.*

108. The Emergence of the Christian Tradition The complex emergence of orthodoxy and the limits of its pluralism; the Church, its liturgy and doctrine; its self understanding and its way in the world; the first four centuries.

109. The Emergence of the Protestant Tradition The reformations of the sixteenth century; their impulse and critiques; their solidarity and divergences; the problem of constructive Protestantism.

208. People and Movements in Christianity Studies in paradigmatic and idiosyncratic individuals, and in historical movements and periods (in different semesters: Greek and

Russian Orthodoxy; Augustine; Francis of Assisi, and Joan of Arc; Modern Catholic Thought; other). *Normal prerequisites: 100 or 108, or 109, as appropriate, or permission of the instructor.*

209. Issues and Topics in Christianity Critical inquiry into facets and problems in Christian thought (In different semesters: Christian Ethics; Faith and Secularity; Idea of the Saint; The Holocaust; other). *Normal prerequisites: 100 or 108 or 109, as appropriate, or permission of the instructor.*

C. American Religious Culture

211. Aspects of American Religious Culture Studies of American life in which religion and other dimensions of culture significantly interact (In different semesters: The New England Tradition; Black Religious Experience in America; Jews and Judaism in the United States; American National and Civil Religion; Sects and Cults; other).

D. Religion and Contemporary Culture

110. Western Religion and Modern Culture Interpretive analyses of aspects of modern culture and sensibility — literary, social and institutional — from both secular and theological sources; inquiry into the dimensions of religion in culture, personal, social-ethical, and ecclesiastical.

410. Religion in the Contemporary West Critical explorations into the problematic and the forms of religious sensibility in the contemporary West. *Normal Prerequisites: Senior standing and permission of the instructor.*

The MAJOR entails a minimum of 10 courses.

1. Religion 100
2. Four courses within a tradition (Buddhism, Judaism, Christianity).
3. Five courses chosen with departmental guidance to assure diversity and complementarity within the field.
4. Of the ten courses, three will be at the 300 level.

The MINOR entails a minimum of 6 courses.

1. Religion 100
2. Three courses within a tradition
3. Two other courses
4. Declaration and Advisement

Russian

See German and Russian

Russian and Soviet Area Studies

Associate Professor Segall, *Director*

An interdisciplinary program designed to give a broad, well balanced and eclectic coverage of the Russian and Soviet areas. Presented through the departments of economics, German and Russian, history, political science, religion, and sociology-anthropology.

401. Interdisciplinary Seminar Intended to integrate the several approaches of the Russian and Soviet Area Studies Program and to provide a framework for independent study of a comparative nature. Offered cooperatively by the staff of the program. *Prerequisite: Permission of the instructor.*

MAJOR: three from Russian 200, 231, 232, 233, 234; History 253, 254; Russian and Soviet Area Studies 401; and four courses of the following, of which no more than two, including independent studies,* may be accredited from any numbered group:

1. History 313*
2. Political Science 350, 366, 490*
3. Economics 376
4. Russian 251, 252, 352, 353; 354**; 355**, 390
5. Religion 208*
6. Sociology 314

MINOR REQUIREMENT A (Recommended for those who plan to pursue graduate work in the field of Russian or Soviet studies): Russian 116 (or the equivalent); History 253, 254; Russian and Soviet Area Studies 401; and three courses from the following, of which no more than two, including independent studies,* may be accredited from any numbered group:

1. History 313*
2. Political Science 350, 366, 490*
3. Economics 376
4. Russian 231, 232, 233, 234
5. Russian 251, 252, 352, 353, 354, 355, 390
6. Religion 208*
7. Sociology 314

MINOR REQUIREMENT B (Recommended for those who do not plan to use materials of the program as a foundation for graduate studies): History 253, 254; Russian and Soviet

RUSSIAN,
SOVIET
AREA
STUDIES

Area Studies 401: two courses from among Russian 352, 353, 354, 355, 390; and three courses from the following, of which no more than two, including independent studies,* may be accredited from any numbered group:

1. History 313*
2. Political Science 350, 366, 490*
3. Economics 376
4. Religion 208*
5. Russian 251, 252
6. Sociology 314

*When the topic is approved by the coordinator.

**These courses count toward the major only if specified Russian language materials are used.

Science

258. History of Science Traces developments in science as a major aspect of Western civilization. Examines science and scientific enterprise by devoting particular attention to the following: the structuring of basic assumptions about nature and method; social, cultural, and religious dimensions of scientific change and discovery; noted developments in the physical and life sciences. Topics vary and will be announced each term. Recent topics have included: The Scientific Revolution, History of the Physical Sciences, History of Medicine, Darwin and Social Darwinism, and American Science.

Contemporary Science Exploration of the nature and growth of some of the major concepts by which science explains the phenomena of nature.

261. Problems of energy, communication and population in relation to quality of the environment and, in turn, of human life are discussed from their fundamental scientific basis.

262. Development of those concepts that relate to our knowledge of matter, with references to chemistry of the earth and especially to contemporary science and its implications for man.



Sociology and Anthropology

Professor Kavolis

Associate Professors Israel and Seaford, *Chairman*

Instructors M. and J. Kassovic

Through a comparative study of the variables and the constants in human behavior, in preliterate, historical, and contemporary societies, the department aims at developing an empirically grounded and reasonably sensitive understanding of the wide range of human culture. It is believed that an appreciation and respect for other ways of life is valuable in itself, provides insights into our society, and is a pillar in liberal arts education.

SOCIOLOGY,
ANTHROPOLOGY

Recent graduates are found in such varied fields as consumer advocacy; elementary, secondary, and post-secondary education; inventory management and control of business. Majors have successfully continued their study in various graduate and law schools; e.g., University of Chicago, University of Texas, SUNY at Binghamton, and Dickinson School of Law.

Anthropology

100. An Introduction to Physical Anthropology Holistic treatment of human populations emphasizing both biological and cultural evolution. Man's place in nature as a culture-creating social animal. Reconstruction of the human experience through primate fossil evidence, stone artifacts, ethnography, and the study of non-human primate behavior. Human variability from genetic and cultural perspectives. Role of language in human evolution. Human adaptive strategies from the dawn of culture of the rise of civilization in both Old and New Worlds.

101. An Introduction to Cultural Anthropology Culture, an anthropological concept. Its definition in historical perspective. Its phenomenological aspects including technological adaptation, family and kinship, political organization, economics, law, and social control. Also expressive aspects as sociolinguistics, art, folklore, magic, religion, ethos, and world-view. These topics illustrated by cross-cultural examples. Sociocultural change. The ethics of anthropological research.

200. Introduction to Manual Communication A course designed to inform the student of problems confronting the deaf and to provide basic knowledge of deaf communication. Communication and linguistic theory. Elements of American Sign Language. Psychological and sociocultural dimensions of deaf education. Manual vs. oral: the history of a controversy. Finger-spelling.

201. Special Topics in Anthropology Offered periodically in response to current interests. Sample topics include American sign language, anthropological linguistics, archaeological methods, comparative roles of women, communication, death in other cultures, political anthropology.

211. Cultural Ecology Anthropological approaches to the study of human adaptation. Ecosystem models. Comparative study of human and non-human adaptations. Ecology and human survival. *Offered in alternate years.*

230. Cultures of East Asia Origins of Chinese civilization and its relationship to other societies. Sociocultural change and continuity from traditional to modern China. Western impact culminating in the Peoples Republic of China. Minorities.

241. Contemporary Peoples of Latin America An examination of the life of present-day primitive and peasant peoples of Middle and South America. These societies are seen holistically, and as they relate to urban and state centers. *Offered in alternate years.*

242. Indigenous Civilization of Latin America An archaeological and ethnological reconstruction of the rise of civilization in Mesoamerica and South America from the early hunters to the high cultures of Aztec, Maya, and Inca. Cultural consequences of the Conquest. *Offered in alternate years.*

250. Contemporary Cultures in Changing Africa A survey of sub-Saharan societies with particular attention given to the East African cattle peoples, South Africa, and the West African states. The effects of the shift from tribe to nation with respect to kin relations, ritual, economics and politics. The emergence of new patterns in society and culture. *Offered in alternate years.*

306. Human Evolution The human skeleton compared with other primates in space and time. Mechanisms of evolution. Hominid phylogeny. Biological antecedents of culture. Evolution and religion. An answer to who we are.

307. Comparative Cultures: Method and Theory An introduction to theory and to comparative methodology in anthropology. Participant-observation, functionalism, British and French structuralism, the Human Relations Area Files, and problems inherent in doing anthropology due to its broad, interdisciplinary nature are explored. *Prerequisite: 112 or permission of the instructor.*

322. Population An introduction to formal demography and theories of fertility, mortality and migration. Cross-cultural comparison of demographic phenomena. Analysis of solutions to increasing world population pressures.

365. Religion and Social Order A cross-cultural survey of the functions of religion, magic and myth in simple and complex societies. Religion and communication. Myth and social structure. An historical summary of the scientific study of religion. *Prerequisite: another anthropology course or permission of the instructor. Offered in alternate years.*

392. Anthropology Seminar A specialized seminar investigating the contributions of various anthropolo-

gical approaches to the understanding of cultural processes. The cultural processes recently discussed have included Communication, Women in Anthropological Perspective, Kinship, and Death Rites. *Prerequisite: Permission of the instructor.*

Sociology

110. Social Analysis Selected topics in the empirical study of the ways in which people's character and life chances are affected by variations in the organization of their society, and of the activities by which social arrangements varying in their adequacy to human needs are perpetuated or changed.

111. Introduction to Thinking About Society Examination of certain major patterns of belief in our society, such as belief in equality, in the social origins of evil, in the possibility and value of progress through social-political action, in science as truth, and in tolerance because of the relativity of all values. The influence of these beliefs on the way we live. Most of the reading material will be drawn from recognized classics of thought, with contemporary writings included as cautionary examples.

205. Group Dynamics This course draws on literary, cinematic and philosophic as well as sociological sources to analyze the forms and patterns of thought on diverse topics by various groups. Our focus is on the values displayed by groups as they encounter their surroundings and one another. *Consult the instructor to find out what particular topic will be offered in a given year.* Previous topics have been the relations between men and women, and living and aging.

207. Self, Culture and Society The diverse ways in which human beings comprehend what kinds of persons

they are. Close reading of autobiographies and analysis of emotional climates in which particular experiences of selfhood arise and of civilizational categories by which they are judged to be valid or not.

224. Perspectives on Race Race relations in the American and other societies. Afro-American history, dynamics of prejudice, pathologies of the ghetto, civil rights and Black Power movements and white reactions to them.

225. Family: Emotions and Structures Social functions of the family, the history of emotions between the sexes, the determinants to family cohesiveness, the effects of diverse modes of childraising, and the implications of variation in the norms of sexual behavior.

302. Social Stratification Social class systems and derivative behaviors. Economy and political power as the tools and the formative agents of social classes. Styles of life and social mobility.

305. Methods of Social Research In combination with Theory, the teaching of the techniques of method is subordinated to an understanding of the role of method as a means of mastering the confusion of the empirical world. Methodologies are seen as commitments to fundamental theoretical positions. *Prerequisite: one course in sociology, preferably 360, or permission of the instructor. This course must be taken concurrently with 380.*

314. Soviet Social System Social structure and dynamics of the Soviet Union. Identification of the areas of strain and the different possible directions of change. Comparison with American institutions. *Offered in alternate years.*

324. Field Work in Urban Problems By combining readings, a seminar, and direct involvement, this course is

SOCIOLOGY,
ANTHROPOLOGY

designed to familiarize the student with the difficulties and complexities involved in applying sociological knowledge to the analysis and solution of urban problems. Individual or collective research, or action projects will be planned by the students and the instructor. These projects are to be carried out within groups or agencies concerned with poverty, racial tensions, community organization and redevelopment, education or other problem-related aspects of urban setting. Weekly seminars and individual tutorials will involve a discussion of the ethical, theoretical and methodological materials relevant to the field work experience. *Prerequisite: Permission of the instructor.*

350. Comparative Social Pathology Cross cultural and historical studies on the social origins of destructive and self-destructive behavior. Social institutions, social change, and cultural values as sources of damage to life, health, and sense, of meaningful existence. Pathological myths. Responses to pathology.

360. Deviant Behavior and Social Control Examination of actions thought to be contrary to society's rules. Examples are drawn from different kinds of criminal, delinquent, and psychotic behaviors in order to understand the nature of moral violation and personal responsibility. Recommended to anyone interested in a sociological approach to good and evil.

375. Sociocultural Change Processes and symbolic underpinnings of social and cultural modernization in the West and in China. Alternative moral and political responses to experiences of disorder, rigidity, lacking vitality, and contradiction. Revolutions, social movements, formations of communities of conscience. Civilizational backgrounds and personal predicaments of "post-modernity."

380. Sociological Theory In combination with Methods this course represents a philosophical, analytical, and speculative approach to the activity of theorizing. Representative works of sociologists, major and minor, are read as attempts to achieve absolute truth. *Prerequisite: one course in sociology, preferably 360, or permission of the instructor. This course must be taken concurrently with 305.*

390. Sociology Seminar A specialized seminar, intended to relate a broad area of theoretical concern to the problems and procedures of current research. *Prerequisite: Permission of the instructor.*

490. Interdisciplinary Seminar This seminar provides an opportunity for multifaceted exploration, in a working relationship with representatives of another social or humanistic discipline, of selected problems of joint interest. *Prerequisite: Permission of the instructor.*

MAJORS:

The department offers two majors, one in anthropology and one in sociology.

Students majoring in anthropology are required to take 100, 101, 306, 307, 392, and five other courses, one or two of which can, with the approval of their advisor, be taken in other departments.

Students majoring in sociology are required to take 305, 380, and seven other courses, one or two of which could, with the approval of their advisor, be taken in other departments.

Freshmen interested in either sociology or anthropology are urged to consult with the department at an early date.

No MINOR.

NOTE: Comparative Civilizations 102, 105 and 490 will count toward the major in sociology.

Spanish and Italian

Professors Angiolillo, Fox,* and Martinez-Vidal, *Chairman*
Associate Professor Surís
Assistant Professor Connor

The department of Spanish and Italian offers courses designed to introduce the student to the language, literature and civilization of the Latin world. For those who need instruction on the elementary and intermediate levels the courses are offered on an intensive basis with five contact hours a week. These courses as well as the ones in conversation and composition are designed to help the student in any other major who needs Spanish or Italian to complement studies. The latter language is especially useful for those who plan to study in Italy; particularly, the Dickinson Program in Bologna.

SPANISH,
ITALIAN

Spanish majors acquire through the courses offered a better understanding of Hispanic culture. They are encouraged to spend some time abroad and to integrate this foreign experience with the departmental program.

The flexibility of the program is such that many tracks and combinations of study are possible. This depends upon the student's personal goals and post-graduation plans. Many of the majors also have a second major, i.e., another language, anthropology/sociology, international studies, psychology, economics, etc. The knowledge of Spanish or Italian language and the culture they represent can be a major asset in professional schools and many positions in business and government, be it on the state or federal level.

Unless otherwise indicated, all courses above the intermediate level are conducted either in Spanish or Italian.

*On leave Spring 1980.

Spanish

101-104. Elementary Spanish An intensive study of the fundamentals of Spanish grammar, with special attention given to pronunciation and oral expression. Composition, and literary and cultural readings. *Please refer to Graduation Requirements (Languages).*

116. Intermediate Spanish Review of Spanish syntax. Introduction to conversation and composition through selected cultural and literary readings. *Prerequisite: 104 or the equivalent.*

231, 232. Spanish Conversation and Composition Careful attention to grammar and style as seen in short stories and articles and in compositions written on a periodical basis by the students. Advanced practice in the oral aspects of the language based on everyday situations. *Prerequisite: 116 or the equivalent, with a grade of at least C.*

233. Introduction to Hispanic Literature This course offers an overview of the main periods and concepts in the literature of the Hispanic World as well as an introduction to the methods and terminology of literary criticism. A number of literary texts are selectively introduced to illustrate both cultural and literary trends. *Prerequisite: 116 or the equivalent, with a grade of at least C.*

234. Spanish Literature from Romanticism to the Present A survey of nineteenth and twentieth century peninsular literature. Examination of trends and movements through the close reading of representative authors. *Prerequisite: either 231, 232, or 233, or the equivalent, with a grade of at least C.*

236. Masterpieces of Spanish-American Literature Reading and discussion of representative works of Spanish-American literature from the colonial period to the present, with an emphasis

on the twentieth century. *Prerequisite: 233 or the equivalent.*

290. Topics in Hispanic Studies Study of significant cultural, literary as well as historical topics concerning the Spanish-speaking world. Peninsular and Latin-American Topics alternate on a yearly basis. Some topics offered in past years were: *Latin America as a Colonial Province, Sephardic Culture and Civilization, and History and Civilization of Mexico.* Specific topics to be announced before registration. *Prerequisite: Permission of the instructor. One-half or full course.*

341. Aspects of Spanish Civilization In-depth study of several aspects of Spanish civilization. Attitudes, values and mores as manifested in their history and their artistic achievements. Oral and written reports concerning some cultural aspects. *Prerequisite: 231 or 232 or the equivalent.*

343. The Culture and Civilization of Latin America to 1825 A study of Latin-American history and culture from its beginnings to the end of the wars of independence. Study of the process of the discovery, conquest and colonization of Latin America, the colonial system and its influence in the formation of the Latin-American character. Analysis of the development and characteristics of the independence movements. *Given in alternate years. Conducted in English.*

344. The Culture and Civilization of Latin America Since 1825 Study of the formation of the Latin-American countries and of the main cultural, political, social and economic factors which have influenced their development since the achievement of independence. Emphasis on the historical and cultural significance of twentieth century developments beginning with the Mexican Revolution. *Given in alternate years. Conducted in English.*

352. Spanish Renaissance and Baroque Culture, Literature Non-dramatic literature of 16th and 17th centuries, with emphasis on major figures such as Garcilaso de la Vega, Cervantes, Gongora, and Quevedo. *Offered in alternate years. Prerequisite: 233 or 234, or permission of the instructor.*

353. Spanish Renaissance and Baroque Drama A study in depth of the trends and themes in the Golden Century drama. The focus will be upon the close reading of plays by Lope de Vega, Tirso de Molina, Calderon and some of their precursors and contemporaries. *Offered in alternate years. Offered on occasion as a bilingual course. Prerequisite: 233 or 234, or permission of the instructor.*

357. The Generation of 1898 A study of the intellectual ferment of this period with a critical reading of selected works by Unamuno, Maeztu, Baroja, Azorin, Machado, and Valle-Inclan. *Given in alternate years. Prerequisite: 233, 234 or the equivalent.*

358. Contemporary Spanish Literature A study of representative contemporary works. Special emphasis on the different trends and ideas as reflected in works by Pre-Civil War authors as well as the literary resurgence of the Post-Civil War. *Given in alternate years. Prerequisite: 233, 234 or the equivalent.*

372. Contemporary Spanish-American Literature An in-depth study of important 20th century works, with an emphasis on the new Spanish-American novel since 1945. *Given in alternate years. Prerequisite: 233 or the equivalent.*

382. Seminar in Spanish Literature A thorough investigation of major figures or important literary trends in hispanic literature which was not covered by the majors in previous courses. The majors will work on a semi-independent basis with a particular instructor and will present reports to the seminar

and participate in subsequent discussions. *Prerequisite: 233, a major or minor in Spanish.*

MAJOR: nine courses, numbered 231 and above (including Spanish, 233, 341 and 343 or 344), at least eight of which must be in the department and in the language of the major. The course that is taken outside the language of the major must be approved by the department.

Beginning with the class of 1981, every Spanish major who spends the year or part of the year off campus is required to take a minimum of four courses in the department, of which at least two (not independent studies) are to be taken during the senior year. In case of not being able to fulfill this requirement, the student has the option of taking a comprehensive examination during the first semester of the senior year.

MINOR: five courses numbered 231 or above, including 231 or 232 (either of which may be waived by special permission of the department).

NOTE: To elect a major, a student must have attained an inclusive average of at least 2.00.

Italian

101-104. Elementary Italian An intensive study of the fundamentals of Italian grammar, with special attention given to pronunciation and oral expression. Composition and literary and cultural readings. *Please refer to Graduation Requirements (Languages).*

116. Intermediate Italian Review of Italian syntax. Introduction to conversation and composition through selected cultural and literary readings. *Prerequisite: 104 or the equivalent.*

231. Italian Conversation and Composition Practical use of Italian in oral and written communication. Review

SPANISH,
ITALIAN

of grammar deficiencies where needed to achieve correct and more natural expression. Varied readings and classroom exercises are utilized to achieve the goals of the course. *Prerequisite: 116 or the equivalent.*

250. Studies in Italian Literature Reading and discussion of representative works of Italian literature from the origins to the present. *Prerequisite: 116 or the equivalent.*

290. Topics in Italian Studies Study of significant cultural, literary, historical, and linguistic topics in Italian civilization and culture. Specialists from other disciplines will, from time to time, contribute by lecture and discussion to a deeper understanding of certain specific subjects of study, e.g. Renaissance Art, Italian political parties, etc. *Prerequisite: 116 or the equivalent.*

NOTE: A Major and Minor are not offered in Italian. Students should refer to the interdisciplinary minor in Italian Studies.



Studies in Theatre and Dramatic Literature

Professor Brubaker,* *Director*

An interdisciplinary program using the perspectives of the dramatic arts and literature to examine the theory, history and practice of theatre presented by the departments of classical studies, dramatic arts, English, modern languages and literature, and music. Majors in this field are required to participate in the Mermaid Players and must be accepted by the director.

MAJOR: ten courses including Dramatic Arts 102 and 103 (Theatre History); two of the following: Dramatic Arts 101 (Acting), 200 (Stagecraft), 201 (Directing); and six of the following, one of which shall be from classical studies or modern languages and literature and one shall be a course dealing with the Renaissance period:

Classical Studies

Greek

391, 392 Seminar: Greek Drama

Latin

234 Latin Poetry

Dramatic Arts

101 Acting

102, 103 Theatre History

200 Stagecraft

201 Directing

301 Special Topics in Performance and Production

304 Studies in Theatre History

English

342 Renaissance English Drama

346 Shakespeare I

347 Shakespeare II

388 American Drama

396 Modern Drama I

397 Modern Drama II

Modern Languages and Literature

French

352 The Theatre of the Sublime

360 Modern French Theatre

German

304 German Literature of the Baroque, Rationalism and *Sturm und Drang*

309 The Drama of the 19th Century

313 Modern German Drama

Russian

390 Russian Drama

Spanish

352 Spanish Renaissance and Baroque Culture, Literature, Prose and Poetry

353 Spanish Baroque Culture, Literature and Drama

Music

103 20th Century Music

104 History of Opera

THEATRE,
DRAMATIC
LITERATURE

*On leave 1979-1980.

Independent Studies

There are occasional seminars offered by the several departments in topics appropriate to this field of concentration which would extend the list given above.

No Minor.



SPECIAL PROGRAMS

The College offers a number of special programs of study which enrich the regular offerings of the several major departments and the normal curriculum. Dickinson believes that interdisciplinary programs, independent study, off-campus study, and other variations on the normal, on-campus, four year, in-course degree program are important ingredients for heightened intellectual motivation.

Independent Studies, Independent Research, Honors In a Discipline*

SPECIAL
PROGRAMS

Dickinson recognizes the wide variation of interests, motivation, and abilities in its student body and believes that its academic program must provide options which meet these diverse needs. Accordingly, it encourages students with the requisite ability and motivation to undertake self-directed programs of study under the guidance of faculty members.

The following options compose the overall program of independent studies and research available in any programmatic area in which there is responsible faculty competence. Independent studies are available in any programmatic area with the approval of an appropriate department or coordinating faculty committee. The precise options may vary, however, from program to program.

Freshman Independent

Study. Freshmen who, on the basis of advanced placement, have qualified for credit in an introductory course (except foreign language courses below 230 and such other courses as may be designated by the departments) and desire to work more extensively at the

survey or principles level of a discipline may enroll for a tutorially directed course or half-course in independent study within the same body of knowledge.

A freshman who wishes to take a second independent study or a course of independent research, or who wishes to pursue independent study or research on terms available to sophomores, juniors, and seniors, must petition the Committee on Academic Program, with supporting statements from the academic advisor and proposed supervisory instructor.

Independent Study For Sophomores, Juniors and

Seniors. Independent studies allow a student to pursue systematically an academic interest outside the listed course offerings. The study may include experimental work (in the sciences), reading, several short papers, a single paper, or any other device mutually acceptable to the super-

*The term 'discipline' shall be understood to mean any academic program which offers either a major or a minor.

vising faculty members and the student. The work may be supervised by one instructor or several instructors from one department or several departments. Such interdepartmental studies must be approved beforehand by the Committee on Academic Program. Sophomores may undertake one independent study or one independent research course per semester unless permission is granted by the Committee on Academic Program to take two independent studies on the basis of a petition supported by the student's academic advisor. Juniors and seniors may undertake two such courses per semester. To be eligible, the student must have a cumulative average of 2.0 or the permission of the Committee on Academic Standards.

Independent Research For Juniors And Seniors

Independent research, like independent study, allows a student to pursue an academic interest beyond the listed course offerings, but this pursuit must culminate in an original contribution to a discipline, whether in the form of fully supported conclusions or in the form of a creative effort. Although supervised by faculty from one department or several departments, the work is to be largely self-initiated and self-directed—an introduction into research and practice in presenting the results of an investigation. Conclusions must be presented for evaluation no later than one (1) month prior to the student's graduation. The program may be elected (maximum credit: four full courses per semester) for the junior year, the senior year, or both. In order to register for the program, special permission is required from the Committee on Academic Standards for students with less than a 3.00 average in the department or departments supervising the independent research. Programs of independent research involving more than

two such courses per semester must be approved by the Committee on Academic Program. Interdepartmental research must be supervised jointly by the respective faculty members and must also be approved by the Committee on Academic Program.

Candidacy For Departmental Honors.

Students participating in the independent research program described above shall be eligible to be voted departmental honors on the completion of the program. In assessing each candidate, the departments may conduct departmental comprehensive examinations or may invite outside examiners. If, in the judgment of the department, a candidate meets the standards for graduation with honors, the project shall be so designated.

Integrated Independent Study And/Or Independent Research For Juniors

And Seniors. This is a one- or two-year program in any approved combination of integrated independent studies and/or independent research. The program, as developed by the student in consultation with the faculty concerned, shall be presented to the Committee on Academic Program for their approval and review.

Course-Related Study.

Independent work of high quality done in conjunction with a regular course may be recognized by a letter of evaluation prepared by the instructor and incorporated in the student's permanent record.

Special Majors

Tutorial Majors

Some departments may approve superior students as tutorial majors. Such a program differs from independent studies and research in several ways. For one, the student is guided in a program in the component areas of an entire discipline for approximately two years. That program's balance is ensured by prior departmental approval. Secondly, the student is free to take regular courses in the student's major discipline with the approval of the tutor. Normally the student will receive a letter grade for a 600 series course, but the Pass/Fail option is also available under the same restrictions as in standard courses.

The student meets on a regular basis with a tutor to discuss essays and readings dealing with particular problems posed by the tutor. Finally, the student sits for a comprehensive examination, both written and oral, administered by a committee composed of the department and one person outside the department. Normally, at least one-quarter of the student's final semester is given over to preparation for these examinations. One re-examination may be permitted within the calendar year. Students will be graded on the examination as having passed, failed, or passed with departmental honors. Approved students may register for up to four courses per semester under the tutorial rubric.

The Self-Developed Major

The option of a self-developed major is available to students who desire a somewhat different field of concentration which, although a recognized field of learning and relevant to the liberal arts, is not substantially addressed by any one department. Recent self-developed majors have included Women's Studies, Medieval Studies, Russian Language and Literature, and Black Studies.

A student contemplating a self-developed major should prepare a proposal which includes those courses relevant to the other topic, and seek the written endorsement of four faculty members for the proposed major which shall consist of ten or more courses. The supporting faculty will secure the advice of chairmen of those departments in which the student contemplates course work for concentration.

The student must present this validated proposal to the Committee on Academic Program for approval by the Subcommittee on The Self-Developed Major. The student in this program will work closely with an appointed adviser. Changes desired in this program will be submitted with the approval of the adviser in written form to the subcommittee for final approval. Under ordinary circumstances, a student accepted in a self-developed major may not apply any of the ten approved courses toward the completion of a departmental major or minor.

Upon the completion of every semester, each student involved in the self-developed major will submit to the subcommittee (with a copy to the adviser) an evaluation statement of progress and commitment to the major as a whole, experience in individual courses, and work with the adviser. The adviser will submit to

SPECIAL
MAJORS

the subcommittee, and to the student an evaluation describing the student's progress, achievement, and commitment.

A student who does not possess departmental course prerequisites for a particular desired course must present to the department chairman a copy of the major proposal indicating the importance and value of that course to the major, and providing to the chairman the student's ability to handle the course. The chairman, in consultation with the instructor of that course, will then act upon the request for a waiver of the prerequisite.

At the conclusion of the student's work the transcript will describe the major as follows: Self-Developed Major: (Title).

Special Options

Nisbet Scholars Program.

The College provides an alternative to the present graduation requirements in the form of a pilot project called the Nisbet Scholars Program. Each member of a freshman class may apply, and up to 48 Nisbet Scholars per class will be selected. They will plan for themselves a course of study suited to their individual needs, personal educational goals, and post-graduation career plans.

It is important that these choices be informed by the history and theory of higher education, tested by the rigors and frustrations of practical involvement in the affairs of society and reassessed continually by the help of others with similar aspirations. Therefore, Nisbet Scholars during their first year at Dickinson participate in a freshman seminar which explores the evolution of the present idea of the liberal arts. Thereafter, they continue to meet regularly with an advisor and their seminar peers throughout the four years they are at Dickinson in order to discuss the development of each Nisbet student's educational

plan. In addition, each Nisbet student must pursue study of a problem whose solution requires the use of several disciplinary perspectives. This "problem oriented experience" may involve students in independent research, internships or course work in their search to understand the many dimensions of the problem they define. The graduation requirement for Nisbet Scholars is 34 courses with a major, including the Nisbet Seminar and continued participation in peer advising as well as completion of the problem-oriented experience.

The Nisbet Scholars Program is named in honor of Charles A. Nisbet, first president of Dickinson College. Nisbet was persuaded by Benjamin Rush to come to Carlisle in 1783 to assume the leadership of a small college founded on the frontier to educate a nation's youth in literature, science, and moral philosophy. He sought to liberate their minds so that they might be prepared to assume in difficult times the leadership of a fledgling nation. Today's Nisbet Scholars have the opportunity and the responsibility to find for themselves a manner of learning that will permit them in their own quite different times to aspire to the same individual and social ideals Nisbet envisioned.

Asian Studies: South or East Asia.

By informal arrangement with the University of Pennsylvania, well-qualified, highly motivated Dickinson students may elect to spend a summer, a semester, or a full academic year (normally the senior year) studying in the Department of South Asian Studies or the Department of Oriental Studies at the University of Pennsylvania. Such election shall be contingent upon recommendation by the student's major department at Dickinson, approval of the dean of the college, and acceptance by either department at the University of Penn-

sylvania. Seniors completing the requirements for the Bachelor of Arts degree at Dickinson who are in residence at the University of Pennsylvania during the entire senior year are exempt from the Dickinson senior residence requirements.

A student planning such a senior year program normally should expect to enroll for intensive language study during the summer prior to the senior year at the University of Pennsylvania. If recommended for graduate study in the same field by the department in which the student is enrolled, the student should anticipate further intensive language study during the summer immediately following completion of the senior year. Majors in either South or East Asian Area Studies are to be pursued in accordance with the provisions of the College for self-developed majors worked out by the student in conjunction with the Committee on Academic Program.

The Latin American Studies Program. Students with an interest in Latin America may apply for candidacy towards the Certificate in Latin American Studies. A candidate for the Certificate will work under the supervision of a member of the Latin American Studies Committee in planning the fulfillment of the requirements of this interdisciplinary program, (see Latin American Studies in the course offering section).

Students who participate in the Colombia Program in Medellín or any other off-campus programs approved by the College's director of off-campus studies, may petition the Latin American Studies Committee to have a maximum of three Latin American courses taken in said programs applied to the course requirements stated above.

This program is viewed as a supporting field of expertise for students majoring in a variety of disciplines, such as history, economics, educa-

tion, fine arts, political science, international studies, anthropology and Spanish. In terms of career prospects, it is specially recommended to future graduates planning to go into high school teaching or social work and related areas in the inner city, as well as to those planning to seek employment with the foreign service, the military, multinational corporations and other governmental agencies or private firms with overseas interests.

For further information on the certificate, students should contact the program's coordinator or the Latin American Studies Committee's representative in the department of their major.

The Binary Engineering Program.

Dickinson College furnishes a program for engineering students, called the Binary Engineering Program, that combines advantages of the small liberal arts college with training to be secured at a large urban engineering school. Cooperating with Dickinson College in this program are the University of Pennsylvania engineering schools, Rensselaer Polytechnic Institute and the Case Institute of Technology. The student can select one of several options under the plan: the first three years may be spent at Dickinson and the final two at the engineering school, leading to a B.S. degree from both institutions; or four years may be spent at Dickinson earning a B.S. degree and then one or two years at the engineering school leading to an M.S. degree in engineering.

The liberal arts-engineering combination recognizes the defects inherent in specialization in the engineering schools, and provides for the Dickinson student a generous background in pure science, in the humanities, and in the social sciences. The program is particularly appealing to those freshmen who like the liberal arts and are not yet willing to commit

SPECIAL OPTIONS

themselves completely to an engineering curriculum.

Candidates for the Binary Engineering Program should inform the director of admissions of Dickinson College that they wish to apply for this program so that they may be assigned to the engineering student adviser. The student in the freshman year should take Physics 131, 132 and Mathematics 131, 132. Students interested in this program should request from the Dickinson admissions office a special booklet which describes the Binary Engineering Plan in greater detail and gives suggested course schedules.

Three-Year Degree

Program. Students desiring to accelerate their degree programs may do so by enrollment in the summer session of the College. A carefully planned degree program, particularly in the first two years, may be completed in three regular academic years (six semesters) and additional summer work. Some will find it wise to begin the summer before the freshman year. One of the advantages of the accelerated degree program is the substantial saving in time, as well as cost, to the student.

Summer School. A representative selection of regular Dickinson College courses, and some special summer programs, are offered during summer school. These courses are offered either as 5½ week courses or as intensive, full-time three week courses. It is possible to take up to four courses in one summer.

Regularly enrolled students from Dickinson or the other colleges in the Central Pennsylvania Consortium may attend summer school to accelerate their programs or to take advantage of some of the unique opportunities. Students in good standing at other colleges are welcome. Entering freshmen are encouraged to attend all or

any part of the summer school program. Qualified high school students may enroll in regularly scheduled summer classes.

The Central Pennsylvania Consortium sponsors unique programs, including special institutes, travel programs, and field science courses.

For further information about any of the summer school opportunities, contact the director of summer school. The *Summer School Catalogue*, published in March, may be obtained from the director's office.

Continuing Education

The office of continuing education serves adults in the community who wish to take advantage of the many activities at the College that will enrich their lives and further their education, both within the regular course work and through other events and special programs. Adults interested in part-time study at the College should inquire through this office. The College provides financial assistance for adults in this program through lower tuition rates.

Adults may enroll in regular classes either on a credit or an audit basis. Should adult students in continuing education decide to become full-time students and wish to apply for regular admission to the College, the director will help them make this change.

Inquiries about study through continuing education should be made to:

Office of Continuing Education
Old West, Dickinson College
Carlisle, PA 17013

Off-Campus Study Programs

Dickinson College encourages its

students to investigate the appropriateness of an off-campus learning experience to their educational objectives. When carefully planned in advance and integrated with a student's on-campus academic program, off-campus study can provide cultural enrichment, personal development, and intellectual challenge through specialized learning environments, many of them utilizing unique resources which cannot be duplicated within the traditional on-campus classroom setting.

The following pages present off-campus programs with which Dickinson is associated. However, they represent only a fraction of the opportunities available. Information about these and other unique off-campus learning experiences can be found in the office of off-campus studies.

Foreign Programs

CENTER FOR EUROPEAN STUDIES IN BOLOGNA.

Students interested in a junior or senior year abroad to study European politics, history, economics, and international affairs, may apply for admission to the College's program in Bologna, Italy. Twenty-eight students are selected each year for study at the Dickinson Center, which was established in 1965 in affiliation with the Johns Hopkins University Center in Bologna, under the supervision of a member of the Dickinson faculty. The curriculum includes courses in the following areas: European History and Politics, International Studies, History of European Political and Social Thought, Art History, International Economics, and History of Opera. A unique offering is the Bologna Practicum, an interdisciplinary seminar. (See Interdisciplinary Studies in the course offering section.) Opportunities are also available for independent study

with the Dickinson and Johns Hopkins instructors. Courses are taught in English by the Dickinson director and faculty members from Italian universities and Johns Hopkins. Participants who have not had one semester of Italian previously will be required to take Elementary Italian in Bologna. No particular major is a prerequisite for participation.

Financial aid may be applied for through the customary procedures followed on campus. Interested students should consult with the resident coordinator.

THE COLOMBIA PROGRAM IN MEDELLIN.

The Dickinson College Colombia Program, is a semester of study in Medellin, Republic of Colombia. Supervised by a resident director, the program offers to students an opportunity for immersion in an Hispanic environment, both academic and cultural. Students are enrolled in regular university classes with Colombian students and may take a wide variety of courses in these institutions: Universidad de Medellin, all university faculties; Universidad Pontificia Bolivariana, all university faculties; Universidad de San Buenaventura, psychology and sociology; EAFIT (Escuela de Administracion y Finanzas-Instituto Tecnologico), business administration. The program includes cultural orientation and an intensive 45-hour language course on site prior to the beginning of classes. Students live and take their meals with a carefully selected Colombian family. The program is open to Spanish majors and students of other disciplines with an interest in Latin America who possess a working knowledge of the Spanish language. Sophomores and juniors are eligible to apply. Financial aid is available for Dickinson students. Interested students should consult the on-campus director for additional information.

OFF-CAMPUS STUDY

THE ISRAEL PROGRAM IN JERUSALEM.

The Dickinson College program in Israel in cooperation with the Hebrew University of Jerusalem is a learning experience of approximately 11 months commencing in early July and including three months of Hebrew language instruction (Summer Ulpan) and a full academic year at the School for Overseas Students of The Hebrew University of Jerusalem. Featured is a two course credit interdisciplinary Seminar on Jerusalem (see Interdisciplinary Studies in the course offering section.) taught by the Dickinson resident director; the seminar focuses on Jerusalem from historical, cultural, religious, and literary perspectives and includes guest speakers and field trips to related sites. In addition, students enroll in courses offered by the School for Overseas Students in a wide variety of academic areas. Housing is in dormitories at The Hebrew University of Jerusalem. The year in Israel begins with an orientation program, including field trips, led by the resident director prior to the beginning of the Ulpan intensive Hebrew language instruction. The program is normally open only to juniors. Financial aid is available to Dickinson students on the same basis as if they were on the home campus. Interested students should consult the Director of Judaic Studies.

INSTITUTE OF EUROPEAN STUDIES.

The Institute of European Studies offers study programs for juniors and seniors at seven leading European university centers (Durham, Freiburg, London, Madrid, Nantes, Paris, Vienna), each one offering unique perspectives and opportunities utilizing the particular academic and cultural resources of its location. Under the supervision of a permanent resident director, each center offers its own particular academic programs, experienced aca-

demic advisors accustomed to dealing with the difficulties in integrating a student's foreign study program with that of the home institution, and a full range of supportive services: housing, university registration, personal counseling, medical care, student activities, records, and the like.

The institute also provides orientation programs including intensive language study where appropriate. Students study under distinguished European professors in a European environment. The London, Madrid, Nantes, Paris and Vienna centers offer a core of courses taught within the institute by university professors and, except for London, also enable qualified students to enroll in regular courses within the faculties of the universities themselves. At Durham and Freiburg, students enroll as fully integrated students of the university, and the institute provides tutorial assistance supplementing their university course work whenever appropriate. Students are recommended for admission by the College. Limited financial assistance is offered. For further information, consult the campus coordinator.

INTERCOLLEGIATE CENTER FOR CLASSICAL STUDIES IN ROME.

Majors in Latin or Greek, or other students especially interested in classical antiquity, can spend one or two semesters at the Intercollegiate Center for Classical Studies in Rome. This center features the combination of carefully chosen master teachers from American colleges and universities with the irreplaceable glory of the sites of the classical past. Dickinson students are eligible for scholarships to the Center. The Dickinson classics department also manages the Christopher Lee Roberts Scholarship which may be used for a semester at the center. Field trips from the center in Rome are part of every semester's work, concentrat-

ing on the Etruscan north in the fall term and the Naples area in the spring. At the same time, in the middle of Rome itself, classes in the Latin and Greek texts allow the student to complete the same reading that would have done at the home campus.

INDIA SEMESTER PROGRAM.

Under the direction of a member of one of the Central Pennsylvania Consortium faculties, the program offers a fall semester of study at the University of Mysore, Mysore, India. Students are introduced to Indian history, culture, religion, and contemporary developments, and then take a core of three courses on the Cultural Heritage of Karnataka (the historic name of Mysore State) taught in English by faculty of the University of Mysore: Kannada Language, Karnatic History and Culture, and Modernization and Economic Change. The fourth course is an independent study project. In addition, students may audit regular courses in the university in areas such as anthropology, archaeology, Indian philosophy, music, dance, and yoga. Sophomores, juniors and seniors may apply.

OTHER STUDY ABROAD PROGRAMS

are available throughout the world. Students may be able to enroll directly in a foreign university, in specialized courses and institutes for foreigners at leading universities abroad, or in American college-sponsored programs designed to meet the needs of American students who wish to pursue their educational interests in another part of the world. Recent Dickinson students have studied for an academic year, a semester, or a summer throughout Western Europe, and in the Soviet Union, South Africa, Senegal, Hong Kong, Ghana, Nepal, India, Israel, Colombia, Mexico and Canada. The office of off-

campus studies has more information on programs and procedures.

Programs in the United States

THE HARRISBURG URBAN SEMESTER.

The Harrisburg Urban Semester (THUS) is a multi-disciplinary academic program combining an internship, course work, and independent study in an urban setting. Sponsored by the Central Pennsylvania Consortium, the program combines the study of urban affairs with internship opportunities in which students may explore career possibilities and test classroom theories in actual practical experiences.

Student participants spend either the fall or the spring term in houses and apartments in Harrisburg which are leased by THUS. The program is designed as a four-course experience, including an internship, an urban seminar, and either a special interest seminar or an independent study relevant to the internship and directed by an on-campus faculty member. The course and internship structure is designed for students from all departmental backgrounds. Students who wish to deviate from the four-course program must have the approval of the director of off-campus studies.

Financial aid is available for Dickinson students.

Urban Semester 301, 302

Internship—2 course credits—Each student will intern on a 20 to 25 hour per week basis with a public or private agency. Internships are available in federal, state, county, city, private secular, and private religious agencies. The internship is intended to accommodate the vocational, educational, and personal goals of the individual participant.

OFF-CAMPUS STUDY

(NOTE: One of the internship course grades will be on a Credit/No Credit basis, while the other internship course will receive a regular letter grade. Both evaluations will be given by faculty of The Harrisburg Urban Semester.)

Urban Semester 305

Urban Seminar—One course—This multi-disciplinary seminar taught by THUS faculty focuses on the nature and problems of urban society. In addition to comprehensive reading assignments, source materials may be provided by selected urban professionals, community leaders, and concerned urban citizens, who will be present at some of the classroom sessions. Further, the seminar will bring together the various urban perspectives of the students which have developed through their internship experience. (NOTE: The grade for this course is given by the faculty of The Harrisburg Urban Semester.)

Urban Semester 306

Special Interest Seminar—One course—Each semester several special topics will be treated in a seminar format. Topics are selected with regard to the general internship interests of student participants and each student may select that seminar group which is treating the topic of greatest relevance to the student.

(NOTE: The grade for this course is given by the faculty of The Harrisburg Urban Semester.)

THE WASHINGTON SEMESTER PROGRAMS.

In cooperation with the American University and an allied group of colleges and universities, Dickinson offers to a few high-ranking students (usually juniors) the opportunity to participate in one of several academic programs

sponsored by the American University in Washington, D.C.

The one semester opportunities are American Government, Urban Affairs, American Foreign Policy, International Development, Economic Policy, Criminal Justice, American Studies, and Science and Technology.

The usual course of study includes a seminar in which the student has an opportunity to listen to and question government officials from all levels, Supreme Court Justices to lower level bureaucrats. In addition, the program requires a substantial independent research paper. There is also the opportunity to serve in an internship with an office on Capitol Hill, such as in an agency, a lobby organization or another course-related office. As an alternative to such an internship, the student may elect a regular course offered by the university.

Dickinson students are eligible to participate in the fall semester. They should consult with the Dickinson coordinator early in their academic career to receive further details on the programs and on courses which may be required as prerequisite to admission.

THE APPALACHIAN SEMESTER PROGRAM.

The Appalachian Program is a one-semester experience located in the heart of Appalachia, at Union College, Barbourville, Kentucky. Offered every semester, it is open to juniors and seniors interested in studying the Appalachian region — its strengths, problems, and challenges. The program is strongly interdisciplinary in nature and includes three courses plus credit for field work in a variety of disciplines. The courses are: Orientation Seminar, Economics and Appalachian Poverty, Social Institutions in Appalachia, and the Field Practicum (either an internship in a local service agency or a directed independent study project in the region at large.) This approach is designed

to combine interdisciplinary classroom experiences and community experiences into a living-learning situation for the total involvement of students and faculty. The Appalachian Semester program is open to students of all majors and is particularly recommended for undergraduates who want to explore in depth the Appalachian region and its people and also those students who plan to enter a variety of service-oriented occupations. For more information consult the director of off-campus studies.

THE CONSORTIUM EXCHANGE PROGRAM.

Dickinson, Franklin and Marshall, Gettysburg and Wilson Colleges form the Central Pennsylvania Consortium. One of the advantages of this educational cooperative venture is that students have the opportunity to take courses at any member college. This program of exchange is encouraged because it allows for greater flexibility in a student's educational program.

The office of off-campus studies coordinates consortium exchange programs for students. The appropriate forms, catalogues, and other information are available there. The application procedure is rather simple, with only an application form and a course approval form necessary. Applications should be submitted to that office by May 1 for a Fall Semester, and December 1 for a Spring Semester.

Any Dickinson student who is approved by this College for study at Franklin and Marshall, Gettysburg, or Wilson College, may take a course, several courses, a full semester, or a full year at the other college. Except for summer and January programs at the other colleges, the normal tuition fee is paid to Dickinson. No fees are paid to the other college except residence fees where appropriate. Grades, in addition to course credit, are transferred into this college.

INTERNSHIPS. An internship is a special field experience on or off campus that provides the opportunity to learn through practical experience. An internship also often allows a student to solve problems by applying principles learned in prior classwork. The internship can also enable a student to explore career possibilities while still in school. Normally open only to juniors and seniors, internships must be approved in advance by the Subcommittee on Off-Campus Study. The subcommittee will assign academic credit as a rule up to a maximum of four course credits within a given academic year, with a minimum of half a course credit and a maximum of three course credits within a given semester. Internships will be undertaken on a Credit/No Credit basis.

OFF-CAMPUS STUDY

Procedure

- A. *Departmental internships.* To participate in internships approved as regular offerings of an academic department of the College, a student must
 1. Satisfy stated departmental requirements for approval of the internship and its evaluation.
 2. State in writing educational objectives applicable to the internship.
 3. Obtain the approval of the chairman of the department and the director of off-campus studies.
- B. *Self-developed internships.* For all other internships, a student must
 1. Complete an Internship Agreement form containing:
 - a. the educational objectives of the proposed off-campus internship, relating them to a particular academic discipline
 - b. a detailed description of the internship project
 - c. a reading list and a statement of its relevance to the internship project

- d. a description of the kind of evidence which the student will present at the completion of the internship in order to demonstrate that the educational objectives have or have not been met
 - e. written approval of the project from the Dickinson faculty member who will supervise the student's internship
 - f. written approval from the person who will serve as the on-site supervisor.
2. Submit the Internship Agreement form through the director of off-campus studies to the Subcommittee on Off-Campus Study for approval. The Subcommittee may require the student to defend the proposal in an oral interview.
- C. *Evaluation.* At the completion of the internship and before credit can be granted, the student must
1. Submit to the faculty internship advisor the results of the internship experience in a readily visible form such as an essay, a summary report, a project, a creative work. The results must demonstrate that the student has combined and assimilated the practical experience and the academic work.
 2. Submit a Student Internship Evaluation form to the director of off-campus studies for review by the Subcommittee on Off-Campus Study.
 3. If the internship is for more than two course credits per semester, defend in person the results of the internship experience in an oral examination with the faculty internship advisor, a member of the subcommittee and at least one faculty member from the appropriate academic department(s) appointed by the chairman of the subcommittee.

OTHER unique programs of study are available in this country. For example, recent Dickinson students have studied off-campus to pursue special interests in the following curricular areas: archaeology, Black Studies, Chinese, East-West Comparative Cultures, journalism, public communications, Urban Studies, Women Studies, business, drama, ecology, studio art, and law.

COMPUTER CENTER. The Computer Center is located in South College and consists of administrative offices, the computer equipment, and areas for computer terminal use. The primary computer system is the Digital Equipment Corporation PDP-11/70, including the mass storage devices of removable disk packs and magnetic tape. An upper/lower case line printer and a card reader complete the PDP-11 configuration. Almost all computer use is via terminals, both hard copy and video, which are concentrated in the computer center but are also scattered throughout the campus. More than 10 terminals are in the computer center for both academic and administrative use. Students may also use remote terminals located in campus buildings housing the departments of mathematics, physics, geology, chemistry, psychology, and the various social sciences. Additional terminals for administrative use are in the admissions office, library, registrar's office, and alumni records office.

A small NCR 8200 series computer system shares the administrative computing load, particularly the treasurer's office requirements. This system provides a strong COBOL language capability for continuing development of programs.

The PDP-11 system offers a wide variety of languages. Introductory computer courses generally use BASIC but the advanced courses can become involved in assembly lan-

guage, PASCAL, LISP, FORTRAN, or COBOL. All users have a wide choice of utility programs available such as text editors, text formatting programs, a Batch processing facility, computer games, and an electronic mail system.

Students have unlimited use of the PDP-11 computer system whether enrolled in a computer course or not. There are disk storage limits but these are usually not confining. More than

one-fourth of Dickinson's students are using the computer system to some degree. In addition to courses listed under the computer science heading in this catalogue, the mathematics department is offering experimental computer courses in the areas of information systems, data structures, computer architecture, operations research, and artificial intelligence.





STUDENT LIFE

One of the primary objectives of the educational program at Dickinson College is to help students develop the capacity to make wise decisions and to use freedom of action with the sense of responsibility which should characterize mature citizens in a democratic society. The College values its residential character and small size. It permits and encourages efforts to unite experiences inside and outside of the classroom in support of the full development of each student.

Dickinson has moved in recent years to give students greater latitude for the management of their own affairs. Self-governance is a characteristic of residence hall life. Students are full members of the College committees which affect all aspects of life at Dickinson and which make visible our commitment to creation of a learning community.

The educational services staff is responsible for coordinating various student support functions and for working with individuals and groups of students to assist them in making the most of the opportunities for growth that exist at the College.

STUDENT LIFE



Student Support Services

Advising and Counseling

Every student at Dickinson is assigned a member of the faculty who acts as adviser. The adviser helps to plan student programs for each semester and advises on choice of major and plans for future study and vocation. Faculty advisers to freshmen are assigned to groups of students who live in the same area of a residence hall. This allows the adviser to become familiar with the total life of the student and to assess the impact of non-academic activities upon the student's academic performance. Freshman faculty advisers work closely with upper class resident advisers who live in freshman halls.

A few days before the beginning of the fall semester, new students participate in an orientation program designed to acquaint them with the academic, the social, and cultural aspects of life at Dickinson.

The counseling center staff, which consists of three college counselors, is available to all students for a variety of developmental concerns including educational-vocational decisions, psychological problems, development of individual goals, and choice of major. The staff makes a particular effort to initiate career orientation programs.

Each student is assigned a career assistant for his/her personal career concerns. All career assistants are students who have been specially trained by the Counseling Center staff to provide counseling service for a variety of matters ranging from academic choices that have career implications (i.e. choice of major field) to preparation for vocational decisions after graduation. Several of the career assistants serve upper class students in their respective departmental areas while others are assigned to lower class students according to residence units.

Also available for counseling are the dean of educational services, the associate deans, and the college chaplain.

The Committee for the Health Professions, consisting of six faculty members, provides specific advice on professional school preparation, and prepares a letter of recommendation to accompany a student's application to a professional school. Individuals who express an interest in the health professions (including M.D., D.D.S., D.O. and D.V.M.) are assigned a committee member as preprofessional advisor to supplement the College's regular advising program.

Virtually all U.S. medical and dental schools have the following among their requirements:

1 year General Biology	(Biology 111, 112)
1 year Principles of Chemistry	(Chemistry 131, 132)
1 year Organic Chemistry	(Chemistry 251, 252)
1 year Physics	(Physics 111, 112 or
Math	131, 132)
English	

STUDENT
SUPPORT

Students should complete these courses by the end of the junior year, at which time they should take the professional school's application tests for their intended areas of study.

The pre-law adviser, a member of the faculty, counsels all students who are interested in attending a law school after graduation from Dickinson. Students are provided with information concerning the profession, criteria for admission to law schools, and the schools best suited to one's abilities and interests. The best preparation for law school is for one to develop analytical and communicative skills: an ability to solve problems, especially intricate problems that invite controversy and require the skillful application of analytical and argumentative skills. The liberal arts tradition offers many valuable experiences that can contribute to developing these skills. Students going on to law school from Dickinson have majored in a wide variety of fields, primarily in the social sciences but frequently in the humanities or natural sciences.

Several criteria govern one's opportunity for admission to law school. Although different schools emphasize

different aspects, the following criteria are of major importance: Law School Admissions Test (LSAT) which is administered several times a year, one's cumulative grade point average, letters of recommendation, and the school where the bachelor's degree is earned. Undergraduate major and extracurricular activities sometimes play a role. Students should work closely with their advisor, and with the pre-law advisor, in determining what course of study to pursue and what law schools to seek admission in.

Food Service

All resident students are expected to participate in the College's Board Plan, the cost of which is included in the Resident Fee. The food service department will provide for special dietary problems, when the existence of such problems is documented. The food service often presents special "theme" meals. All boarding students eat together in the dining room in the Holland Union.

Health Service

The College provides a health center staffed by practicing physicians retained by the College and registered nurses who provide care for minor illnesses. The recently expanded and renovated Carlisle Hospital is within walking distance for emergency treatment and major illness. At present College students have access to the services of a consulting psychiatrist and a consulting gynecologist.

The College makes available a new student health/accident insurance plan uniquely designed to complement its health care program. Therefore, students are expected to subscribe to this insurance program. Details of the plan are provided each student prior to Registration. A College-approved health insurance brochure may be obtained through the Office of Student Services or the Business Office.

Placement

The placement bureau, which is part of the counseling center, aids seniors and alumni in solving employment

problems and further assists undergraduates in seeking part-time or summer work during their college years. Vocational guidance materials and career information are available in the counseling center. Placement of teachers is coordinated through the department of psychology and education. A placement library is also maintained.

Religious Life

From its founding, Dickinson College has subscribed to the belief that the worship of God and the study of religion are integral to liberal education. In response to a heritage that recognizes freedom of worship, no student is ever denied admission to the College because of sect or creed. In addition to its courses in the department of religion, the College invites student participation in voluntary worship services on campus. An ecumenical Christian service is conducted on campus each Sunday by the chaplain and guest ministers. In addition to this worship opportunity, Jewish services are conducted each Friday evening at 7:00 p.m. and each Saturday morning at 9:30 a.m.; Roman Catholic Mass is celebrated each Saturday at 6:15 p.m.; and there are special services for the Jewish High Holy Days and for Christian feasts and festivals. Dickinson College has a nationally recognized Hillel Council.

On campus, various denominational and religious fellowships are coordinated through the office of the chaplain and appropriate student-faculty committees. The chaplain provides personal counseling in many different areas of student life, and coordinates his efforts with the campus Counseling Center. The chaplain also teaches courses which enable the religious dimension and ultimate concern of academic life to grow.

Off-campus, in addition to community parish relationships, the Big Brother/Big Sister program is administered through the chaplain's office; this program gives students opportunity to befriend and provide counsel to elementary and junior high school students in the area.

RELIGIOUS
LIFE

Religious life at Dickinson is three-fold in its conception; it relates the concerns of faith to academic pursuits, to personal counseling and growth, and to worship and service on and off-campus.

Residence Halls

Dickinson is a residential college. This means that the program of the College is conducted on the assumption that an important element in education is an interchange of ideas outside the classroom, which is facilitated by the association of students living together in residence halls. By utilizing a variety of physical arrangements, the College attempts to enhance a student's educational environment and sense of community without hindering the individual choice of life style.

In recent years, the College has instituted several sections of academically related housing, such as language dormitories.

Any student who is not officially accepted as a commuting or married student is required to reside in a College hall for each year of matriculation. All resident freshmen are assigned spaces by the associate dean for residential services on the basis of a questionnaire completed before matriculation. Other students choose their rooms in an order determined by lot. Most men who are affiliated with the ten national fraternities having chapters on the Dickinson campus reside in the College-owned residences assigned to their respective fraternities. Special authorization must be obtained from the office of student services to live off campus.

In accordance with faculty legislation, each residence hall establishes its own regulations affecting the conduct of residents and guests including such matters as curfews and parietal hours. These regulatory codes are developed by residents of the living unit and approved by the associate dean for residential services.

RESIDENCE HALLS FOR WOMEN

Residences for women range in capacity from 8 to 195 students. Freshmen women live in Drayer, Morgan, Malcolm, and Witwer Halls. Each of these residences has a senior resident adviser and a staff of resident advisers available for counseling and advising students.

Upperclass women live in Drayer and Witwer Halls, and several of the smaller campus residences. Students are provided with keys or key cards for their residence halls.

RESIDENCE HALLS FOR MEN

Residences for men range in capacity from 5 to 195. Freshman men live in Malcolm, Morgan and Adams Halls and are assigned an upperclass resident adviser. These are carefully selected sophomore, junior and senior men who are available for advising new students. Upperclass fraternity men and a number of independent men reside in College-owned residence halls assigned to each of the ten national chapters.

STUDENT
ACTIVITIES

RESIDENCE HALLS FOR MEN AND WOMEN (COED)

Adams, Kisner-Woodward, Malcolm, and McKenney Halls are residences for upperclass men and women who reside on alternate floors or in separate suites. The buildings range in size from 10 to 195 students.

Student Activities

Student Government

The principal legislative body of Dickinson students is the Student Senate. The Senate manages approximately \$96,000 designated for student activities, elects students to serve on the judicial bodies of the College and on All-College committees, and makes recommendations on matters affecting the student body to the appropriate faculty or administrative agencies.

Athletics

Dickinson supports intercollegiate competition for men in football, soccer, cross-country, basketball, swimming, baseball, track, tennis, golf and lacrosse. Dickinson women participate in intercollegiate tennis, basketball, swimming, field hockey, volleyball, and lacrosse.

Contests are scheduled with colleges which have similar athletic and academic policies. Student athletes are eligible for scholarships and grants-in-aid on the same terms as other students.

There is an extensive intramural sports program which includes activities for men, women and coeducational groups. Competition is offered in basketball, touch football, field hockey, volleyball, softball, bowling, swimming, golf, squash, archery, badminton, tennis, table tennis, lacrosse, pool, skiing and marksmanship.

The intramural and recreation program also encompasses club activities. Some of the present club sports at Dickinson are boxing, ice hockey, men's volleyball, women's softball, skiing and outing club.

Debate

The Debate Council participates in an extensive program of intercollegiate debating. All students are eligible for membership; those students with good scholastic averages are eligible to travel with the squad to tournaments scheduled with other colleges throughout the East and South.

Dramatics

The Mermaid Players, Dickinson's drama organization, presents three major productions each year, lab shows, and a series of one-act freshman plays. Opportunities for participation are unlimited, for there is much work to be done with scenery, makeup, coaching, and costumes.

Fraternities and Sororities

Approximately 50 percent of the Dickinson men belong to the ten national fraternities which have chapters at Dickinson College — Alpha Chi Rho, Beta Theta Pi, Kappa Sigma, Phi Epsilon Pi, Phi Delta Theta, Phi Kappa Psi, Phi Kappa Sigma, Sigma Alpha Epsilon, Sigma Chi, and Theta Chi.

Two national sororities have chapters at Dickinson — Pi Beta Phi and Kappa Kappa Gamma. There are two local sororities — Alpha Delta Epsilon and Delta Nu. Approximately 35 percent of the Dickinson women are affiliated with sororities.

STUDENT
ACTIVITIES

Music

Dickinson offers students varied opportunities to participate in vocal and instrumental musical organizations. The College-Community Orchestra is open to students and musicians from the surrounding area; the College Choir presents two major concerts each year; the Chapel Choir is composed of about 30 voices; and the Collegium Musicum is a small, select group of experienced singers and instrumentalists chosen from the student body and faculty.

Dance

BALLET AND MODERN DANCE — Opportunities in dance are available both on campus and at the Central Pennsylvania Youth Ballet (CPYB), an established regional ballet company and school located a mile from campus. Experienced ballet students may be invited to join the CPYB, which presents several full ballet performances each year in Pennsylvania and surrounding states. The CPYB and the College cooperate in offering a summer program of ballet instruction for five weeks in June and July.

The Dance Theatre Group is open through audition to everyone in the College community. As part of this organization students can participate in workshops and

master classes given by visiting artists, choreograph their own works, and perform in concerts. Two major concerts and other performances are given each year. The East Point Studio, which is located two blocks from the campus, offers intensive classes in modern techniques and composition for students at a more advanced level.

Credit toward the College physical education requirement is granted for classes in both modern dance and ballet at beginning and intermediate levels.

ISRAELI DANCE TROUPE — The Dickinson College Israeli Dance Troupe is a semi-professional group of college students who perform their many dances in the Carlisle-Harrisburg area.

Membership is selective, but anyone who is interested is invited to try out in the fall. Israeli Dance Troupe looks for sincere interest and enthusiasm as well as some dancing ability.

Publications

In addition to the *Catalogue*, the College publishes two periodicals: *Dickinson Today* and the *Dickinson Alumnus*.

Student publications include the college newspaper, *The Dickinsonian*; the *Microcosm*, Dickinson's yearbook; *The Mermaid's Tale*, an information annual for old as well as new students; and *The Belles Lettres Review*, a literary magazine.

Radio

WDCV-FM (88.3), the College radio station, is supported entirely by student efforts. Programming is consistent with regulations for non-commercial stations as outlined by the FCC.

Social Life

A number of Student Senate Committees, Social Organizations, and the office of student services plan

events for students of a social, cultural, recreational, and educational nature.

The Film Society presents popular and foreign films four evenings a week, and Dickincinema presents classics several times a semester. The Social Committee presents popular performers in concert several times a semester. The Cultural Affairs Committee brings performing arts programs to the campus at least ten times during the year and covers the areas of dance, theatre, and music. Several of these events are residencies. All of these events are either free to students or available at a nominal charge.

An annual all-campus event is the Spring Festival, an arts festival which includes cultural dinners, artisans at work, folk groups, recreational activities, and concerts. The Congress of African Students also holds its all-College Black Arts Festival in the spring and it includes speakers, music groups, poets, gospel groups, and artists.

The Committee for Social Activities plans programs for wide College participation. Among events scheduled by these two groups have been popular dances, Burlesque Night, semi-formals, polka nights, film festivals, square dancing, coffee-houses, record hops, and Oktoberfests.

Numerous other all-College social events take place frequently; a few of these and their sponsors are: Uncle Herbie's Deli (Hillel Council), Sweet Shoppe Ice Cream Parlor (Pi Beta Phi Sorority), Song Fest (Wheel and Chain and Omicron Delta Kappa), student-faculty basketball game (PEER Staff), and Mardi Gras (International House and Committee for Social Alternatives).

Coffeehouses are popular on campus, and two residence hall lounges are frequently utilized for these. Often there is live entertainment.

Bus trips to such places as Washington, D.C., New York City, and Philadelphia are sponsored several times a year. Sometimes students tour these cities, other times they attend concerts or plays (i.e. Kennedy Center). Trips are also sponsored to other colleges to attend cultural events, special theme week-ends, or popular concerts.

Numerous clubs also sponsor events which are primarily of interest to their own members. Some of these organizations are Outing Club, language clubs, Ecology Club, Geology Club, Fencing Club, and Ski Club. The preprofessional clubs (prelaw, pre-business, pre-journalism, and pre-health professions) all sponsor functions such as seminars, speakers, and career trips.

Societies

The Pennsylvania Alpha chapter of Phi Beta Kappa was established at Dickinson College April 13, 1887. Election to membership is the highest academic honor available to a Dickinson student, and only those who rank among the top 10 percent of their class are eligible.

Other honorary societies are as follows: Tau Kappa Alpha, debating and oratory; Pi Delta Epsilon, journalism; Alpha Psi Omega, drama; Pi Gamma Mu, social science; Phi Mu Alpha Sinfonia, music; Delta Phi Alpha, German; Pi Delta Phi, French; Sigma Delta Pi, Spanish; Eta Sigma Phi, classics; Psi Chi, psychology.

Omicron Delta Kappa, established at Dickinson in 1927, is a national leadership society for seniors of outstanding ability. Wheel and Chain is a leadership society for senior women. Raven's Claw and Skull and Key are campus social recognition societies.

Judicial System

Dickinson subscribes to the principles of the Joint Statement on Rights and Freedoms of Students developed by the National Student Association, the American Association of University Professors, the National Association of Student Personnel Administrators, the National Association of Women Deans and Counselors, and the Association of American Colleges. In line with these principles, Dickinson seeks to regulate student conduct only in areas which have persuasive relevance to the College's function as an academic institution.

The Academic Violations Hearings Board

The Academic Violations Hearings Board hears cases involving allegations that a student has violated a policy which governs the academic program of the College. The Board is composed of the associate dean of the College, three members of the faculty, the vice president of the Student Senate, and two students elected by the Student Senate.

The Social Violations Hearings Board

The Social Violations Hearings Board hears cases involving allegations of misconduct except allegations that a student has violated a policy which governs the academic program of the College. It also hears appeals from persons on whom a penalty has been imposed by the judicial body of a residence hall. The Social Violations Hearings Board consists of two faculty members, one administrator, the vice-president of the Student Senate, and three students elected by the Student Senate.

The Student Grievance Board

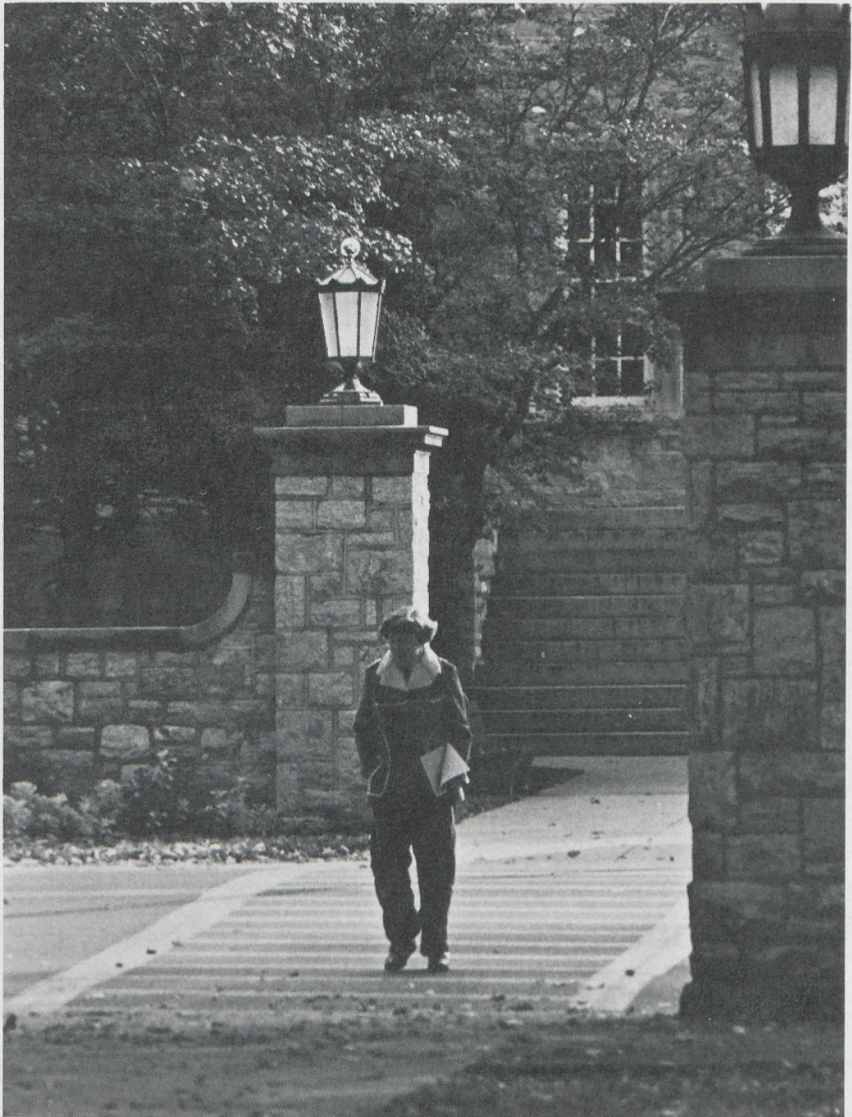
The Student Grievance Board may hear allegations of faculty actions which constitute violations of the "Guidelines on Faculty Conduct." The board consists of the dean of educational services, the vice-president of the Student Senate, two members of the faculty elected by the faculty, and one student elected by the Student Senate.

Automobiles

Freshmen are not permitted to maintain automobiles at Dickinson or in Carlisle and its environs. Upperclass students may maintain automobiles when they are registered with the Security Office.

Animals

Animals are not permitted in College buildings or on College property. The only exception are animals kept in laboratory buildings where they are used for scientific purposes authorized by members of the faculty or seeing eye dogs.



ADMISSIONS

Dickinson College desires students whose intellectual ability and achievement, whose motivation, creativity, self-discipline and potential assure their success in a selective academic community. As important to the College are students whose character and personality have won respect as the result of their accomplishments, their interest in others, the things they value and are enthusiastic about, and their special talents or abilities. In other words, the College wants students who are well-read, academically alert, interested in scholarly excellence, and likely to make a contribution to the quality of campus life by their participation, their concern for the well-being of others, and their talents which find expression outside the classroom.

ADMISSIONS

The admissions staff seeks to identify students whose goals are in harmony with the aims of a liberal education as it exists in the Dickinson environment.

Aware that students from various social, ethnic, and economic backgrounds contribute to the richness of campus life, the College welcomes applications for admission from a diverse group.

It is the policy of the College to create a freshman class from the most qualified candidates in its applicant pool. Dickinson College does not discriminate against applicants and students on the basis of race, religion, sex, color, handicap, and national or ethnic origin.

The College has a stabilized enrollment of about 1610. Each applicant is carefully considered in terms of personal and academic credentials. Along with the evidence supplied in the application form, the College also considers records and statements from secondary schools and test results including the Scholastic Aptitude Test (SAT) of the College Entrance Examination Board (CEEB) or the American College Testing program (ACT). Students interested in a particular field of study may wish to submit a portfolio of their work for review *directly* to the appropriate academic departments.

Dickinson College is a member of the National Association of College Admissions Counselors and subscribes to its Statement of Principles of Good Practice.

Admission Procedures

The admissions application and secondary school transcript form may be obtained from the office of admissions. A fee of \$20.00 is required at the time the application is submitted. This fee is neither refundable nor credited to any account. Regular decision candidates should apply prior to March 1 of their senior year. Early Decision candidates should apply prior to December 15. Regular decision candidates will be notified of the admission decision between March 1 and March 30. Early Decision candidates will be notified beginning December 1 and by no later than January 1. For accepted Early Decision applicants, a \$200 non-refundable registration fee is due by January 10. For students who are accepted for regular admission, the \$200 non-refundable fee is due by the Candidates Reply Date of May 1. The registration fee is applied to a student's first semester tuition bill at Dickinson.

Interview

A visit to the campus for an interview or information session is helpful to prospective students in gaining a clearer understanding of life and study at Dickinson. It is primarily with a view to providing greater insight into the College, rather than as a technique of selection that the interview and visit to the campus are encouraged.

Personal interviews may be scheduled with an admissions staff representative between 9:00 a.m. and 4:00 p.m. Monday through Friday from April 1 through December.

During *JANUARY*, personal interviews may be scheduled on each Monday, Wednesday, or Friday, and in *FEBRUARY*

on each Monday and Friday. During *MARCH*, personal interviews can be given only on each Friday.

Students are welcome to attend group information sessions which are conducted by professional staff members on Saturday at 10:30 a.m., September through April and on Monday, Wednesday, and Friday at 1:30 p.m., August through December except when the College is closed for legal holidays.

Appointments should be made well in advance of a planned visit by writing or calling the admissions office at area code 717-243-5121, ext. 1231 or 245-1231.

ADMISSIONS

Admission Requirements

THE MINIMUM REQUIREMENT FOR ENTRANCE is the satisfactory completion of a secondary school program of at least 16 units, including four units of English, two (preferably three) units of one foreign language, two units of natural science, one unit of a social science, and two (preferably three) units of college preparatory mathematics. The remaining units should be within these academic areas. Most applicants offer more than the minimal requirements.

STANDARDIZED TEST REQUIREMENTS: The Scholastic Aptitude Test (SAT) or the American College Test (ACT) is required of all applicants. Results of either test taken in the junior year must be submitted for Early Decision. All admissions candidates taking either test in their senior year should take them in November, December, or no later than January.

COLLEGE BOARD ACHIEVEMENT TESTING — Achievement testing is not required for admission to Dickinson. However, if a student wishes to satisfy a prerequisite requirement and place out of, or into a higher level course (such as foreign language), that person should plan to take an achievement test or Advanced Placement Test in the

appropriate area. On the basis of this testing, the student will then be placed at the appropriate course level. Those students interested in majoring in the sciences or in math are encouraged to take either the Math Level I or Math Level II College Board Achievement Test in addition to other appropriate achievement tests.

It also should be noted that while achievement testing scores submitted prior to evaluation of an applicant's admission application will not be used detrimentally, in many cases strong achievement testing available during the application review process will be beneficial in a student's admission. For these reasons many students may wish to take selected College Board Achievement Tests.

Applications and schedules for these examinations may be obtained by writing to the College Entrance Examination Board, P.O. Box 592, Princeton, New Jersey 08540.

FOREIGN STUDENT ADMISSIONS: Dickinson College encourages those foreign students to apply for admission who have successfully completed their secondary school requirements and whose knowledge of the English language (as indicated by their score on the TOEFL examination — the Test of English as a Foreign Language) is of sufficient quality to demonstrate capability in pursuing a collegiate program. All inquiries should be directed to the Admissions Office.

PARTICIPATION IN ADVANCED PLACEMENT PROGRAM: A student who achieves a grade of four or five on a College Entrance Examination Board Advanced Placement Test will be granted *credit* for college work in the appropriate department, and will receive *placement* at the discretion of the department.

A student who achieves a grade of three on the Advanced Placement Test may receive, at the discretion of the appropriate department, *credit* and/or *placement*.

Subject matter areas for which no advanced placement examinations exist, and which have been taken at an

advanced level, may be evaluated, upon petition to the relevant department, for advanced status.

Credit granted in accordance with the above statements of policy will satisfy the corresponding graduation or distribution requirements. In addition, such course credit will satisfy the prerequisites requirement in that department for advanced work.

Early Decision

The qualified candidate *for whom Dickinson is clearly the first choice* may apply for Early Decision. Such students must apply prior to December 15 of the senior year and should schedule interviews before that date. The results of the Scholastic Aptitude Test (SAT) or the American College Test (ACT) taken in the junior year must be submitted for Early Decision. The Early Decision candidates are given some preference in the admissions process over regular applicants; however they must be clearly qualified in order to be offered admission. The Early Decision candidates will be notified between December 1 and January 1 as their applications become complete. Regular decision candidates will be notified between March 1 and March 30.

ADMISSIONS

Early Admission

Any student who has accelerated academically is considered as an Early Admissions candidate. An individual interview is required of all students applying in this category. Applications for Early Admission will be reviewed on an individual basis, taking into consideration maturity and readiness to participate in a residential college, as well as academic ability. An Early Admission applicant must have the written recommendation of the secondary school counselor.

Deferred Admission

Some students may wish to defer the start of their college experience until they have pursued an alternative activity for a year or two. While an application is filed for a specific entrance date — and *committee action is taken for that specific date* — a student may request in writing that the application be deferred for a later date of review. Such a review of the credentials is possible with the consent of the Admissions Committee.

Spring Term Admission

Any student who has officially graduated from a secondary school is automatically eligible for spring term freshman admission consideration if the student has not enrolled on a full-time matriculated basis at another college.

The College will also consider for spring term admission, upon the consent and recommendation of the candidates' guidance counselors, students who are currently high school seniors and who wish to start college early.

Transfer applicants for the spring term are also eligible for consideration providing that the candidate has been enrolled as a degree student for the equivalent of at least two semesters prior to the term of desired enrollment at Dickinson.

The application deadline for spring term freshman and transfer admission is December 1 and notification will take place by January 1. Accepted candidates are required to submit a \$200 non-refundable registration fee which is deducted from their first semester tuition fees.

Common Application Plan

Dickinson College, along with a select number of colleges in the United States, participates in the Common Application Plan by which it is possible for a student to fill

out one application form which will be used by the colleges subscribing to the Plan. The Common Application Form may be submitted in lieu of the regular Dickinson application form and will be treated in the same way as the Dickinson form. For further information regarding the Common Application Plan and the secondary schools which are participating in it, prospective applicants are advised to check with their guidance counselors.

Dickinson Guest Student Program

ADMISSIONS

Dickinson College welcomes qualified students who wish to study here on a full-time, non-degree status for either one or two successive terms, "in absentia" from their present college. This program is specifically designed for those students who wish to participate in the high quality academic and extra-academic life of a small college community.

Application deadlines are December 15th for spring term admission consideration and August 1 for fall term admission consideration. Applicants are notified of the admission decision on their application on a rolling admissions basis as the applications become complete. A \$200 non-refundable deposit is required from accepted applicants and is applied toward the first semester bill. For further details regarding the Guest Student Program, please write directly to the director of admissions at Dickinson College.

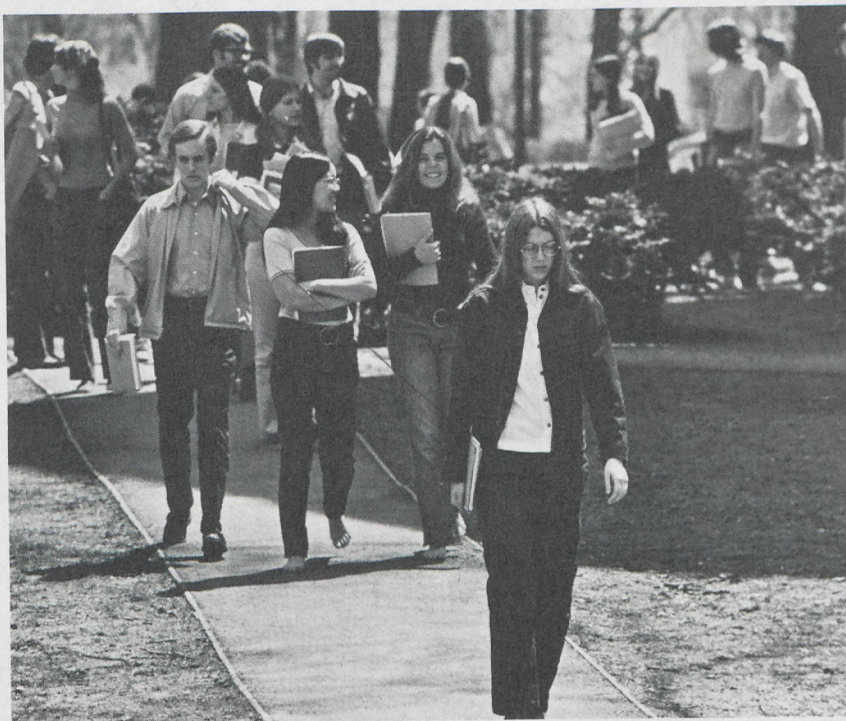
Transfer Students

Dickinson College welcomes qualified applicants with previous academic work at other accredited college-level institutions. An applicant normally will be considered for transfer admission if the applicant has been enrolled as a degree candidate for the equivalent of at least two semesters prior to the term of desired enrollment at Dickinson. Applications for admission consideration should

be submitted to the director of admissions before June 1 for the fall semester and December 1 for the spring semester. If feasible, arrangements should be made for a personal interview. Accepted applicants are required to submit a \$200 non-refundable registration fee. The fee is applied to the first semester tuition bill at Dickinson.

Previous academic work which has been satisfactorily completed with a grade of "C" or better (2.00 or above on a 4.0 scale) in a program of study that reasonably parallels the curriculum of Dickinson College will be evaluated for credit. Normally, the course requirements for graduation (34 courses) will be reduced proportionately for every academic year of full-time work at other accredited institutions. Part-time course work, summer study, and unusual circumstances will be evaluated on a proportional basis using the above formula.

Final determination of credit and the satisfaction of distribution and language requirements will be made by the registrar. Among the academic regulations applicable to all students and of particular note to transfer applicants is the graduation requirement that at least 17 courses be taken on campus, the last 12 of which must be taken while the student is matriculated with an approved major field of concentration.



ADMISSIONS

Readmission

Any formerly matriculated student who wishes to re-enroll must file an application for readmission. Such applications should be filed with the registrar prior to April 15 for the fall semester, and prior to December 1 for the spring semester. A student who was required to withdraw should consult page 190.

A student who is absent from the College at least three years, and who is readmitted and successfully completes the equivalent of at least two semesters of work on campus, may petition the College Committee on Academic Standards to have course credits toward graduation and cumulative grade averages based only on work accomplished after the second matriculation. "Successful completion" will mean the attainment of at least a 2.0 average, or a higher probationary average, as stipulated by the Committee.

Alumni-Admissions Program

The Alumni Admissions Program of Dickinson College is composed of a group of alumni who are interested in providing a service to the students, parents, and schools of their home areas. The Alumni Admissions Program committees are most willing to provide accurate, up-to-date information about the College to all persons interested in learning more about the unique academic, social, and cultural programs available at Dickinson.

If you desire further and more specific information about the College, please feel free to contact the Alumni Admissions Program committee representative living in your home area.

San Francisco, California

Ms. Patricia Collins '71
505 Cypress Point Drive, Apt. 39
Mountain View CA 94043
H. (415) 968-9908
O. (415) 493-2626

Denver, Colorado

Mr. Thomas deMarino '59
5690 E. Happy Canyon Road
Englewood CO 80111
H. (303) 758-3490

Washington, D.C.

Ms. Sharon E. Sievers '70
1400 S. Joyce Street, Apt. A-708
Arlington VA 22202
H. (703) 920-6309
O. (202) 638-4357

Central Florida

Lew and Sharon Sibert '72 & '72
9031 Hogans Bend
Lutz FL 33549
H. (813) 973-3120
O. (813) 971-8520

Southern Florida

Mr. William M. Steckley '62
Steckley Photography
6764 S.W. 77th Terrace
Miami FL 33143
H. & O. (305) 665-0216

H—home phone
O—office phone

Atlanta, Georgia

Miss Pauletta Mademann '70
1029 Franklin Road #7D
Marietta GA 30039
H. (404) 422-8719
O. (404) 971-1600

Chicago, Illinois

Mr. Marc Kenneth Schwartz '75
6 Villa Verde Drive, Apt. 300
Buffalo Grove IL 60090
H. (302) 394-2211
O. (313) 541-8900

Baltimore, Maryland

Barbara Dudley '66
R.D.1, Box 467
Glen Rock PA 17327
H. (717) 235-3388
O. (301) 363-0730

Boston, Massachusetts

Katharine E. Bachman '75
70 Line Street #2
Somerville MA 02143
H. (617) 876-4473

St. Louis, Missouri

Mrs. Judy L. Stone '73
714 Village Wood Court
Ballwin MO 63011
H. (314) 527-8730
O. (314) 434-6960

Northern New Jersey

Mr. and Mrs. William Houpt '57 & '59
24 Blackburn Road
Summit NJ 07901
H. (201) 273-6782

Atlantic, Cape May &
Cumberland Counties, New Jersey

Mr. Donald R. Charles, Jr. '66
17 Candiff Road
Ocean City NJ 08226
H. (609) 399-7063

Central New Jersey

Mr. and Mrs. Mark Lehman '71 & '72
561 Bradford Avenue
Westfield NJ 07090
H. (201) 232-3216
O. (201) 843-7200

Southern New Jersey

Samuel Asbell '66
Suite 116 - Station House
900 Haddon Avenue
Collingswood NJ 08108
H. (609) 795-1214
O. (609) 858-7011

Albany, New York

Cindy Marione '78
16-18 Leisureville
Watervliet, NY 12189
H. (518) 785-4246

Central New York

Rev. Robert J. Thomas '40
255 East Noyes Boulevard
Sherrill NY 13461
H. (315) 363-5193
O. (315) 363-1061

Long Island, New York

Mrs. Barbara Stunt Andrews '63
3852 New York Avenue
Seaford NY 11783
H. (516) 826-4611
O. (516) 785-5411

New York City, New York

Esteban A. Ferrer '72
Battle, Fowler, Jaffin, Pierce & Kheel
280 Park Avenue
New York NY 10017
H. (212) 628-2695
O. (202) 949-8283

Westchester-Rockland, New York

Richard A. Leins, Esq. '71
Greene, Leins & Ryan, Esqs.
Barclay Bank Building
Ossining NY 10562
O. (914) 941-5500

Cleveland, Ohio

Mr. Stephen H. Hoffman '72
1750 Euclid Avenue
Cleveland OH 44115
H. (216) 921-4097
O. (216) 566-9200

Lehigh Valley, Pennsylvania

Attorney and Mrs. Thomas A.
Wallitsch '70 & '70
2436 Allen Street
Allentown PA 18104
H. (215) 432-5952
O. (215) 437-9867

Philadelphia, Pennsylvania

Mr. Kevin Holleran '73
Gawthrop & Greenwood
Box 562, 119 West High Street
West Chester PA 19380
H. (215) 827-9351
O. (215) 363-1717

Pittsburgh, Pennsylvania

Mr. and Mrs. David R. Johnson
'74 & '75
250 Jonquil Place
Pittsburgh PA 15228
H. (412) 563-2441
O. (412) 261-4526

Pocono Area, Pennsylvania

Mr. William M. Thomas '75
802 Manor Drive
Stroudsburg PA 18360
H. (717) 421-3558

Dallas-Fort Worth, Texas

Sandy Quittman Walker '74
3404 Marwick Drive
Plano TX 75075
H. (214) 596-9479
O. (214) 258-4107

Wyoming

Mrs. Mary Beth Wight Peden '71
1801 South Chestnut
Casper WY 82601
H. (307) 235-3566

ADMISSIONS

EXPENSES

The current operating cost of higher education is supported primarily by three areas of income: tuition and fees, endowment, and gifts from alumni, businesses, parents, and friends. The capital investment of the College, presently \$26 million, has come from contributions over the years from many sources. Dickinson College is conscious of the ever-increasing cost of a college education and strives to maintain a quality education that is financially feasible.

All college bills are due and must be paid in full 10 days prior to class attendance for each semester. In the event full satisfaction of an account is not made by the due date, a late payment fee is applied to the account. Failure to settle the student's account by the start of classes will result in exclusion from college; and, no student can have an honorable withdrawal or an official transcript until all obligations have been met.

The trustees reserve the right at any time to amend or add to the regulations of the College, including those concerning fees and methods of payment, and to make such changes applicable to students presently enrolled, as well as to new students.

Fee Structure

Comprehensive Plan

Dickinson operates under the comprehensive fee plan which includes tuition and fees—including support for the Holland Union and the athletic program. The comprehensive fee is applicable to all students enrolled in three or more courses per semester. Students enrolled in fewer than three courses will be billed on a course basis.

Resident Plan

The resident plan includes board, room, and health fee for services rendered through the College infirmary. All resident students are required to participate in the full resident plan unless excused through established College procedures.

Registration Deposit

A registration deposit will be charged prior to each semester to reserve enrollment in the college

class and assignment of dormitory space. This deposit of \$200 per semester is credited toward the semester charges and is non-refundable after the due date announced by the College if a student's registration is cancelled.

Charges and Fees for Full-Time Resident Student 1979-80 School Year

All charges and fees are due 10 days prior to attendance of class each semester. Accounts not settled by the due date will be subject to a finance charge.

	Per Year
Comprehensive Fee — includes tuition and fee	\$4,500
Resident Fee — includes board, room, and Health Center	1,785
Student Senate Fee (payable in full — Fall Semester)	60
Total	\$6,345

On a per term basis the Comprehensive and Resident Fees are billed at one-half the per year charge.



In addition to college charges, it is estimated that the average expenditure per year for books and supplies is approximately \$200.

Miscellaneous and Special Fees

Per course tuition charge for part-time students	\$750
Per course tuition charge for part-time non-matriculated students	540
Auditing, per course for part-time students	270
Activities fee per course for part-time students	35
Practice Teaching	35
Automobile Registration	10
Graduation Fee	20
Application Fee	20
Transcript of Record (provides lifetime service)	20
Finance charge on outstanding balances.	payable once
Health insurance	42
ROTC Cadet Activity Fee—per year	20
Applied Music:	
Full Semester—one hour lesson, per semester	\$190
Full Semester—half hour lesson, per semester	95

EXPENSES

Plan of Payments

An itemized statement of charges is mailed approximately six weeks prior to the start of each semester. Since payment is expected in full prior to the start of classes, persons desiring a payment plan can elect participation in either the Girard Trust Education Check Plan, or the Richard C. Knight Tuition Plan. Complete information on these plans may be secured from the College's business office. Those persons desiring to use one of the plans must complete the necessary details no later than one month prior to the due date for payment.

Students attending college under a provision with a State Board of Assistance or other outside agency must supply complete information to the business office.

Refund of Charges

A student in good standing is entitled to a voluntary withdrawal or a leave of absence at all times. The date on which the dean of the college approves the student's withdrawal form is the official date of withdrawal. A student desiring to withdraw voluntarily from the College must obtain from the registrar or the office of student services an application for withdrawal. This form must be properly completed and returned to the office of student services before the student leaves the campus. No refunds will be made by the business office until the registrar's office cer-

tifies that the withdrawal has been completed.

Every college has many expenses of a continuing nature. In order to plan and maintain these services over the entire year, it is essential that the annual income from fees be assured. It is understood, therefore, that students are entered for the entire college year.

No refund is made for room charges. Pro-rated refunds on board charges are made only upon authorization by the office of educational services.

If a student called away during the semester by an emergency finds it impossible to resume college work, the student must notify the office of student services of voluntary withdrawal or leave of absence immediately.

If the withdrawal occurs before the end of the semester, the student is obligated for the full sum of the activities portion of the comprehensive fee and for tuition beginning with the first day of regularly scheduled classes for the semester as follows:

Two weeks or less	20%
Between two and three weeks	40%
Between three and four weeks	75%
Between four and five weeks	80%
Over five weeks	100%

No reduction will be allowed for absence of students withdrawn for unsatisfactory conduct or scholarship.

NOTE:

Faced with rising costs, the College has had to raise its fees in recent years, and further increases can be expected.

FINANCIAL AID

Dickinson College's financial aid program provides assistance for students whose personal and family resources cannot meet the full cost of a Dickinson education. Thus, financial aid is, first and foremost, supplementary to the family's own best efforts to contribute to the student's education.

In determining family contribution, the Dickinson Financial Aid Office relies on the standard need analysis system of the College Scholarship Service of Princeton, New Jersey. The CSS analysis considers many variables, and aid recipients come from a wide variety of family situations. The difference between the College budget and the CSS computed family contribution is the student's financial need. This need is usually met with a combination of grant, loan, and work, in the form of a "package." The amounts of assistance from the various programs in a "package" vary according to amount of need, specific program eligibility, and academic and personal record. Although Dickinson's funds are inadequate to assist all eligible students, the attempt is made to meet the full need of as many as possible. For 1978-79, about 30 percent of the Dickinson student body is receiving College grant assistance.

Aid programs include institutional grants and scholarships, government gift aid (the federal BEOG and SEOG programs and state-administered scholarships), low-interest loans (the federally-supported National Direct Student Loan program and the Guaranteed Student Loan program), and campus employment. Financial aid recipients are employed through the College Work-Study program. Some institutionally-funded employment is available for other students, on a limited basis. Students not eligible for other assistance may also borrow through the GSL program.

FINANCIAL
AID

To apply for financial aid, a student must submit the Financial Aid Form of the College Scholarship Service to the CSS by February 15 of each year. State scholarship programs may have a separate application. Freshmen and transfer candidates are notified of aid decisions within two weeks of the offer of admission. Returning students must also submit the FAF to the CSS by February 15, and complete the College upperclass application. The FAF must be submitted anew each academic year, and awards may be altered to reflect altered family financial circumstances.

Parents of successful aid applications will be asked to sign IRS form 4506, permitting release of a copy of their latest Federal income tax return from the Internal Revenue Service to Dickinson College.

The College has established certain regulations which, in addition to need, govern a student's aid eligibility. An aid recipient must maintain a satisfactory pace of academic progress in order to remain eligible. In addition, no student may receive assistance for more than eight semesters at Dickinson. (A full summer session counts as one semester.) The Financial Aid Office reserves the right to review any award at any time during the year as circumstances may require.

A student may receive College financial aid to attend any of the foreign study programs sponsored by Dickinson College or the Central Pennsylvania Consortium. GSLs and certain government aid may be used for other foreign study programs such as IES.

A detailed financial aid brochure is available upon request in the Financial Aid Office. Any questions or concerns may be directed to the Financial Aid Office.

THE CAMPUS

The physical plant of the College consists of more than 50 buildings on 48 acres of land near the center of Carlisle, a pleasant community of 20,000. Additionally, the College has a recreation area of 65 acres and other properties apart from the main campus.

While many of the buildings are of Georgian design, a number reflect a more contemporary style. The use of native limestone in most buildings provides continuity throughout the campus.

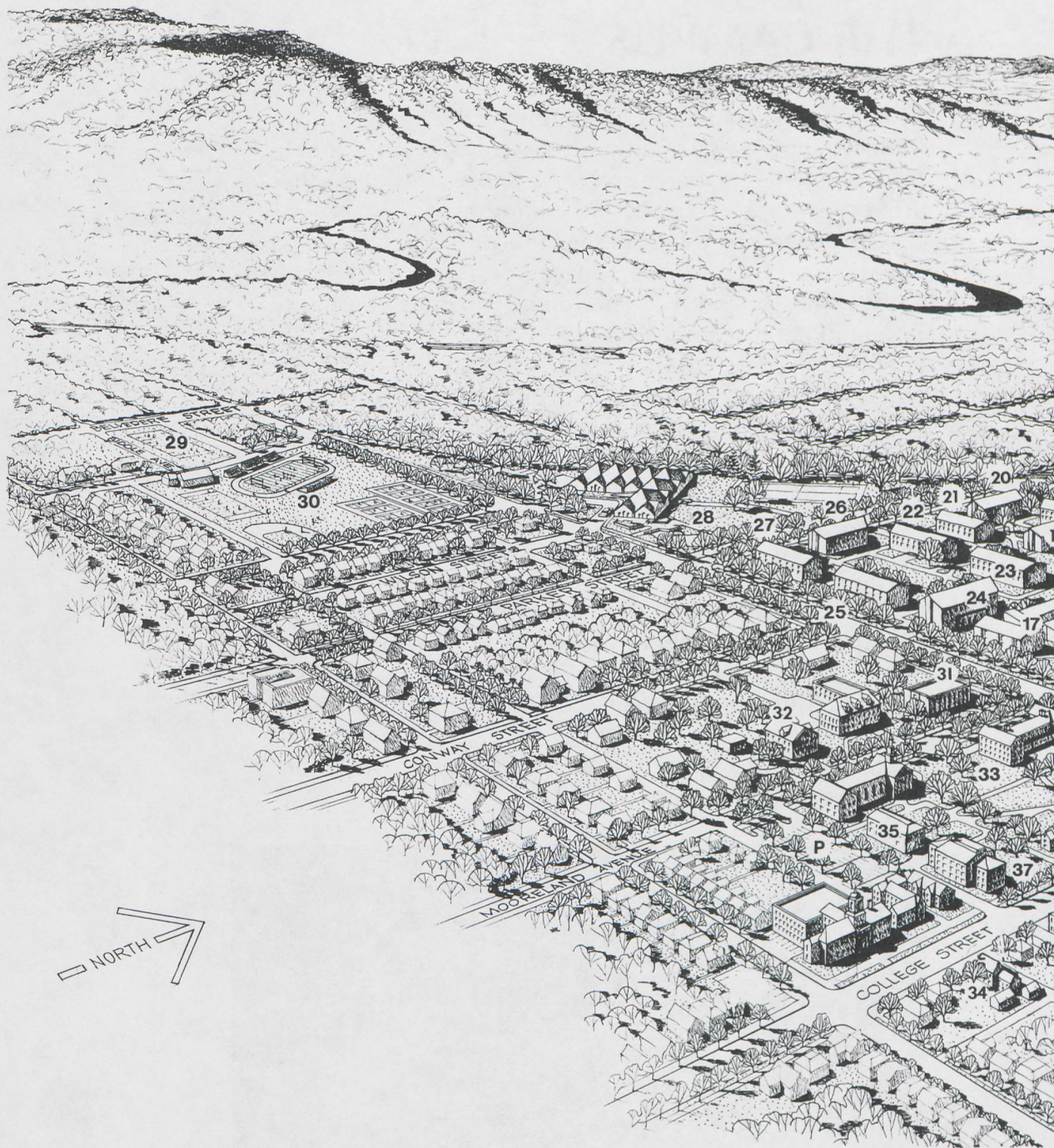
The *John Dickinson Campus* is the site of four major buildings framed by a low limestone wall erected in 1833. Other buildings are grouped around this campus, many being located on the *Benjamin Rush Campus* or other properties west of College Street. The president's house was built in 1833 and has been the residence of the presidents of the College since 1890.

The *Charles Nisbet Campus*, bringing together the Anita Tuvin Schlechter Auditorium complex, the Boyd Lee Spahr Library and 14 residences, is the newest segment of the campus. Fifteen of the 18 buildings on 17-acre Nisbet campus have been constructed in the last decade.

The physical plant is estimated to have a value of more than \$24 million.

THE CAMPUS





DICKINSON COLLEGE • CAMPUS MAP

Map legend

1. Denny Hall
2. Communications and Development
3. Bernard Center for the Humanities
4. Jacob Tome Scientific Bldg.
5. West College
6. Dana Hall of Biology
7. Media Center
8. Althouse Science Bldg.
9. Bosler Hall
10. Biddle House
11. Holland Union Bldg.
12. Montgomery House
13. Spahr Library
14. Art Bldg.
15. Anita Tuvin Schlechter Auditorium
16. Kisner-Woodward Hall
17. McKenney Hall
18. Phi Delta Theta
19. Phi Kappa Psi
20. Phi Kappa Sigma
21. Alpha Chi Rho
22. Sigma Alpha Epsilon
23. Sigma Chi
24. Kappa Sigma
25. Theta Chi
26. Beta Theta Pi
27. Phi Epsilon Pi
28. Life/Sports Learning Center, under construction
29. Women's Athletic Field
30. Herman Bosler Biddle Athletic Field
31. Malcolm Hall
32. Mathews House
33. Morgan Hall
34. Strayer House
35. Witwer Hall
36. Faculty Club
37. Adams Hall
38. Drayer Hall
39. Todd Hall
40. Admissions Bldg.
41. Sellers House
42. South College—Computer Center
43. Alumni Gymnasium
44. President's House
45. Reed Hall
- P. Parking
- C. College Housing



College Buildings

Academic and Administrative

WEST COLLEGE, 1804. Administrative and faculty offices; Inter-Faith Chapel; Memorial Hall, McCauley Room, classrooms, department of economics.

THE BOYD LEE SPAHR LIBRARY, 1967. 250,000 volumes. 1,200 periodical subscriptions.

The library is the core of the liberal arts community and is designed to support scholarly research, independent study, and all regular academic programs of the College. Resources include printed materials in every form, recordings, microfilm, photographs and manuscripts.

The library provides seating for 800 readers, including closed carrels for faculty use and honors carrels for assignment to students pursuing independent studies. Open-stack areas are concentrated on the upper and lower levels. Reference and audiovisual areas are located on the main floor. The Alexander A. Sharp Room near the main entrance offers an opportunity for relaxation in an attractive setting. On the upper level, the Alvah A. Wallace Lounge commands a broad view of the *Benjamin Rush Campus* and the May Morris Room houses Dickinson's special collections.

The library is a United States Government Depository, a member of the Union Library Catalogue of Philadelphia Metropolitan Area, and a member of the Area College Library Cooperative Program of Central Pennsylvania.

When the College is in session, the library is open from 8:00 a.m. to

midnight, Monday through Thursday; 8:00 a.m. to 10:00 p.m. on Friday; 10:00 a.m. to 10:00 p.m. Saturday, and 1:00 p.m. to midnight on Sunday. A late-night study area is provided for student use.

THE BERNARD CENTER FOR THE HUMANITIES, 1970. Named in honor of B.A. and Rebecca S. Bernard, the Center is housed in the restored East College, built originally in 1836. Departments of English, classical languages, philosophy and religion. Classrooms, departmental libraries, seminar rooms, faculty offices.

ALTHOUSE SCIENCE HALL, 1958. Named in honor of C. Scott Althouse. Departments of chemistry and geology. Lecture hall, classrooms, teaching laboratories, research laboratories, chemistry library, geology museum, Bonisteel-Yeagley Multiple Telescope Observatory, faculty offices.

TOME SCIENTIFIC BUILDING, 1883. Renovated 1958. Department of physics and astronomy. Lecture halls, laboratories, Roscoe O. Bonisteel Planetarium, research offices.

DANA BIOLOGY BUILDING, 1966. Named in honor of Charles A. Dana. Department of biology. Lecture halls, laboratories, departmental library, research offices, greenhouse.

REED HALL, renovated 1958. Department of psychology and education. Classrooms, laboratories, offices.

DENNY HALL, 1905. Renovated 1965. Departments of military

science, history, political science, and sociology and anthropology. Classrooms, offices, anthropology museum.

SOUTH COLLEGE, 1948. Renovated, 1970. Department of mathematics, classrooms, offices. College Computer Center (see page 128).

BOSLER HALL, 1884. Renovated 1969. Departments of fine arts, modern languages and music. Language laboratory, electronic learning center, classrooms, seminar rooms, offices.

Student Life

HOLLAND UNION BUILDING, 1964. Named in honor of Homer C. Holland. College dining room, Mathers Theatre, snack bar, social hall, meeting rooms, offices, radio station, game room, college store, campus publications center, television lounge, campus post office, campus security office, counseling center and office of student services.

HEALTH CENTER. Located on the ground floor of Drayer Hall. Completely equipped dispensary and infirmary.

ANITA TUVIN SCHLECHTER AUDITORIUM, 1971. Named in honor of the daughter of Louis A. Tuvin, principal donor. This facility is equipped for three separate performances or as a theater in the round. It contains the latest in audio and lighting features.

THE CAMPUS



Athletic Facilities

HERMAN BOSLER BIDDLE MEMORIAL ATHLETIC FIELD.

Intercollegiate athletics. 12 acres. Football field, tartan track, tennis courts, lacrosse field, baseball diamond, permanent stands, press box, field house, and storage facilities.

ALUMNI GYMNASIUM, 1929. Department of physical education. Main floor for intercollegiate basketball and indoor intramural programs. Swimming pool and offices. Squash courts adjacent.

LIFE/SPORTS LEARNING CENTER,

under construction, is a modern 86,000 square foot facility containing a multi-purpose gymnasium, a 25-yard eight-lane swimming pool with separate diving tank, racquetball and squash courts, and dance and exercise areas. There will be offices for staff, a seminar room, and a training room.

SPORTS AND RECREATION AREA.

65 acres located two miles east of the campus along Route 11. Natural life study area, golf driving range, intramural sports area.

Auxiliary Facilities

FLORENCE JONES REINEMAN WILDLIFE SANCTUARY.

Faculty and students at Dickinson College are privileged to enjoy the use of the 3,500-acre wildlife sanctuary for teaching and study. The sanctuary is administered by the college under an agree-

ment with the Girard Bank and J. Welles Henderson, Esq., trustees of the estate of Mrs. Florence W. Erdman of Philadelphia, who provided funds for its creation and operation in memory of her mother.

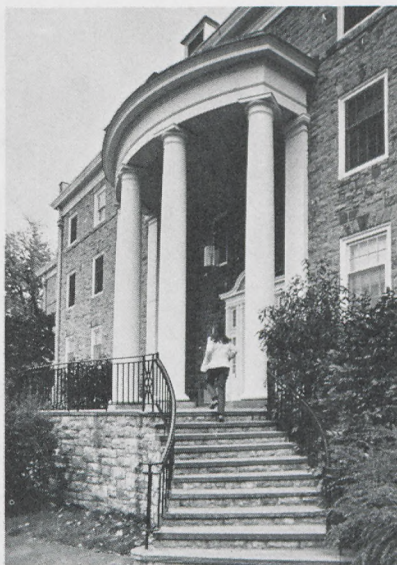
The sanctuary lies on the north flank of Blue Mountain, the first ridge at the edge of the Folded Appalachians, about 7 miles northwest of Carlisle, in a sparsely populated area of Perry County known as Green Valley. It is easily accessible via State Route 74 through Waggoner's Gap. Facilities at the sanctuary include a field station with laboratory, resident manager's house, and limited dormitory space. In accordance with the terms of the will of Mrs. Erdman, the sanctuary may be utilized by students, researchers, and qualified naturalists, under authorized supervision, "... to enlighten and educate the public so as to develop their interest in preserving wildlife for future generations."

Since 1957, the sanctuary vegetation has been undisturbed. No hunting, trapping, fishing, or recreational uses are permitted. Most of the area is developing into a climax forest of oak, hemlock, maple, and birch. Some 100 acres of fields and old pastures provide habitat variety. The sanctuary is on the migration route of numerous hawks and eagles. During the fall, Waggoner's Gap is a popular site for hawk watchers from throughout the East. With northwest winds, as many as 1,500 hawks can be seen passing along the ridge in a single day. Birds, reptiles, and small animals are abundant, and small herds of deer are found throughout the sanctuary.

Active research involving close cooperation by students and faculty is an integral part of the sanctuary's program. It involves such diverse aspects of the sanctuary as trees, deer, birds, algae, sedimentation, and streamflow. There are numerous streams, all of which are unpolluted, and two small ponds, harboring diverse aquatic communities. The geologic

setting of the sanctuary is a syncline, containing a youthful drainage network.

As might be expected, the sanctuary is used primarily by the departments of biology and geology, which jointly participate in its management. Biology students and faculty find unusual opportunities for the study of a variety of animals and plant communities. Those interested in geology find the Green Valley drainage basin provides excellent opportunities to observe the dynamics of geologic processes in an undisturbed setting.



THE CAMPUS

Residence Halls (40 or more residents)

FRATERNITY RESIDENCE HALLS, 1964. Ten residences providing living accommodations for members of Dickinson's ten national fraternities. 46 men each.

DRAYER HALL, 1951. Named in honor of Mr. and Mrs. S. M. Dayer, 149 women.

ADAMS HALL, 1963. Named in honor of Dr. and Mrs. Rolland L. Adams. 172 men and women.

MORGAN HALL, 1955. Named in memory of James Henry Morgan. 195 men and women.

MALCOLM HALL, 1966. Named in memory of Gilbert Malcolm. 77 men and women.

WITWER HALL, 1966. Named for the Witwer family. 77 women.

KISNER-WOODWARD HALL, 1969. Named for Helen Kisner and Hugh B. Woodward. 92 men and women.

McKENNEY HALL, 1973. Named in honor of the McKenney family. 96 men and women in suites of eight.

Residence Halls (fewer than 40 residents)

Biddle, 21 women; Mathews, 16 women; Montgomery, 28 men and women; Strayer, 17 men and women; and Todd Hall, 23 men and women.



DIRECTORY

Dickinson College Board of Trustees 1979-1980

The date of first election to the Board of Trustees appears to the left of each Board member's name.

Honorary President

Samuel W. Witwer, Ph.B., J.D., L.H.D.,
S.J.D., LL.D.

Officers

William S. Masland, A.B. *President*
Bruce R. Rehr, A.B. *Vice President*
Robert A. Waidner, A.B., LL.B.

Secretary
James M. Nicholson, B.A. *Treasurer*
M. Charles Seller, A.B., M.A.
Assistant Secretary
Robert W. Belyea, B.A.
Assistant Treasurer

Members ex officio

Sam A. Banks, A.B., M.Div., Ph.D.,
Litt.D. *President of the College*
John V. Thornton, B.S., LL.B., LL.D.
*Chairman of the Board of
Advisors of the College*

Life Members

1961 Rolland L. Adams, LL.D., Palm
Beach, Fla.
1952 Carl C. Chambers, B.S., Sc.D.,
D.Sc., Estero, Fla.
1965 Carl P. Clare, B.Sc., D.Sc.,
Chicago, Ill.
1945 Sidney D. Kline, A.B., A.M.,
J.D., LL.D., Reading
1958 Edward G. Latch, A.B., B.D.,
A.M., D.D., L.H.D.,
Washington, D.C.
1953 Henry Logan, A.B., A.M., LL.B.,
L.H.D., Ormond Beach, Fla.
1967 John Wesley Lord, A.B., B.D.,
D.D., LL.D., S.T.D., H.H.D.,
Silver Spring, Md.
1959 John B. Peters, Ph.B., Gardners

1948 Samuel W. Witwer, Ph.B., J.D.,
L.H.D., S.J.D., LL.D.,
Chicago, Ill.
1952 Robert E. Woodside, A.B., J.D.,
LL.D., Harrisburg

Term Expires 1980

1979 Henry D. Clarke, Jr.
Greenwich, Conn.
1976 *John Harris, Jr., B.S., M.D.,
M.Sc., D.Sc.,
East Lansing, Mich.
1965 John M. Hoerner, B.S., M.S.,
Sc.D., Atlanta, Ga.
1972 George L. Morrison, Jr., B.E.,
M.S., Harrisburg
1971 Alexander Rush, B.S., M.D.,
Philadelphia
1964 J. William Stuart, A.B.,
Lumberville
1974 Frank K. Tarbox, A.B., LL.B.,
Philadelphia
1976 William J. Taylor, A.B., J.D.,
Chicago, Ill.
1975 William S. Thomas, A.B., F.S.A.,
New York, N.Y.

Term Expires 1981

1977 Flint Kellogg, A.B., M.A.,
L.H.D., Ph.D., Carlisle
1979 Sidney D. Kline, Jr., A.B., LL.B.,
Reading
1974 William S. Masland, A.B.,
Carlisle
1977 Edmund D. Pellegrino, B.S.,
M.D., L.H.D., D.Sc., M.A.,
Washington, D.C.
1969 E. Donald Shapiro, A.B., LL.B.,
New York, N.Y.
1977 *Mary Stuart Gadd Specht,
B.S., Carlisle

DIRECTORY

*Alumni Trustee

- 1975 Jack M. Stover, A.B., J.D.,
Harrisburg
1948 Robert A. Waidner, A.B., LL.B.,
Baltimore, Md.
1976 Samuel W. Witwer, Jr., B.A.,
LL.B., Chicago, Ill.
1966 Harry C. Zug, A.B., M.B.A.,
Philadelphia

Term Expires 1982

- 1961 Sherwood M. Bonney, A.B.,
LL.B., Phoenix, Ariz.
1978 *John J. Curley, A.B., M.S.,
Washington, D.C.
1958 William S. Jenkins, Ph.B., LL.B.,
Cumberland, Md.
1966 C. Law McCabe, B.S., M.S.,
D.Sc., Sc.D., Kokomo, Ind.
1954 W. Gibbs McKenney, Ph.B.,
J.D., LL.D., Baltimore, Md.
1978 G. Wesley Pedlow, Jr., B.S.,
M.S., Ph.D., Lock Haven
1965 James R. Shepley, Litt.D., New
York, N.Y.

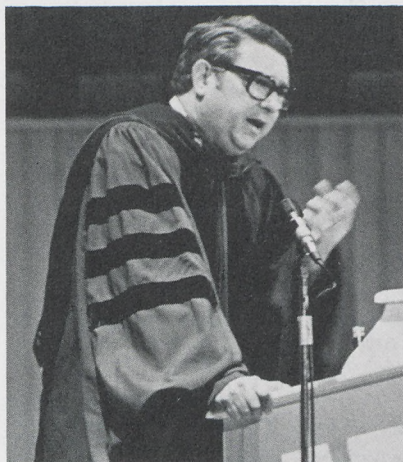
- 1962 Boyd L. Spahr, Jr., A.B., LL.B.,
Philadelphia
1975 F. Thomas Trotter, B.A., D.D.,
S.T.B., Ph.D., Nashville, Tenn.
1971; Emil R. Weiss, A.B., M.B.A.,
1979 New York, N.Y.

Term Expires 1983

- 1967 Robert W. Chilton, A.B.,
Carlisle
1959 John M. Davidson, A.B., Ed.M.,
Wayne
1979 *Benjamin D. James, A.B.,
M.A., Ph.D., LL.D., Carlisle
1958 Edward C. Raffensperger,
Sc.B., M.D., Philadelphia
1965 Mary Ames Raffensperger,
B.A., M.D., Sc.D., Philadelphia
1975 Bruce R. Rehr, A.B., Reading
1974 Daniel J. Terra, B.S.,
Northbrook, Ill.
1974 John B. Warman, A.B., B.D.,
Ed.M., D.D., Harrisburg
1976 Thomas V. Zug, Ph.B., LL.B.,
Haverford



*Alumni Trustee



Faculty 1979-1980

The date of first appointment to the College appears in parentheses at the end of each individual's title(s).

SAM A. BANKS

The President of the College, Lemuel T. Appold Foundation (1975).

A.B., Duke University, 1949; M.Div., Emory University, 1952; Ph.D., University of Chicago, 1971; Litt.D., College of Charleston, 1976.

GEORGE ALLAN

Dean of the College, Russell I. Thompson Chair of the Dean of the College, Professor of Philosophy (1963).

B.A., Grinnell College, 1957; M.Div., Union Theological Seminary, 1960; Ph.D., Yale University, 1963. *Lindback Award for Distinguished Teaching, 1968-69.*

*Faculty emeriti are listed according to the highest rank an individual achieved prior to his or her retirement, and then according to the year he or she achieved that rank. When more than one emeritus professor have the same rank at the time of retirement, and achieved that rank on the same date, they are listed according to the year each achieved his or her preceding rank.

Emeriti Faculty*

WILLIAM W. EDEL

The President of the College, Emeritus (1946).

A.B., Dickinson College, 1915; A.M., 1919; D.D., 1935; S.T.B., Boston University, 1921; L.H.D., Keuka College, 1944; D.D., Hobart College, 1944; LL.D., Gettysburg College, 1949; LL.D., University of Pennsylvania, 1949; D.Hu., Boston University, 1950; J.U.D., Lebanon Valley College, 1956; F.I.A.L., 1959.

HOWARD L. RUBENDALL

The President of the College, Emeritus (1961).

A.B., Dickinson College, 1931; D.D., 1945; M.Div., Union Theological Seminary, 1937; L.H.D., Trinity College, 1957; LL.D., University of Pennsylvania, 1966; LL.D., Dickinson School of Law, 1966.

GEORGE SHUMAN, JR.

Vice President Emeritus (1935).

Ph.B., Dickinson College, 1937; LL.D., Lycoming College, 1958.

WELLINGTON A. PARLIN

Professor Emeritus of Physics (1930).

A.B., Simpson College, 1921; M.S., University of Iowa, 1922; Ph.D., Johns Hopkins University, 1929.

HORACE E. ROGERS

Alfred Victor duPont Professor Emeritus of Analytical Chemistry (1925).

B.S., Dickinson College, 1924; M.S., Lafayette College, 1925; Ph.D., Princeton University, 1930. *Lindback Award for Distinguished Teaching, 1962-63.*

FRANK AYRES, JR.

Susan Powers Hoffman Professor Emeritus of Mathematics (1928).

B.S., Washington College, 1921; M.S., University of Chicago, 1927; Ph.D., 1938.

WILLIAM D. GOULD

George Henry and Bertha Curry Ketterer Professor Emeritus of Philosophy and Religion (1937).

DIRECTORY

A.B., Wesleyan University, 1919; B.D., Garrett Biblical Institute, 1922; Ph.D., Boston University, 1929.

ELMER C. HERBER

Professor Emeritus of Biology (1929).
A.B., Ursinus College, 1925; A.M., University of Pennsylvania, 1929; Sc.D., Johns Hopkins University, 1941.

MARY B. TAINTOR

Professor Emerita of Romance Languages (1928).
A.B., Ripon College, 1911; A.M., Leeland Stanford Jr. University, 1918.

FRIEDRICH SANDELS

Professor Emeritus of German (1946).
Ph.D., University of Giessen, Germany, 1912.

RALPH SCHECTER

Thomas Beaver Professor Emeritus of English Literature (1922).
A.B., University of Illinois, 1916.

BENJAMIN D. JAMES

Richard V. C. Watkins Professor Emeritus of Psychology and Education (1941).
A.B., Dickinson College, 1934; M.A., Bucknell University, 1936; Ph.D., University of Pennsylvania, 1962; LL.D., Dickinson School of Law, 1976.

CHARLES C. SELLERS

Librarian Emeritus with rank of Professor, Historian of the College and Curator of Dickinsoniana (1949).
B.A., Haverford College, 1925; M.A., Harvard University, 1926; Litt.D., Temple University, 1957.

ARTHUR M. PRINZ

Professor Emeritus of Economics (1948).
Ph.D., University of Berlin, 1923; *Lindback Award for Distinguished Teaching, 1965-66.*

MILTON E. FLOWER

Robert Blaine Weaver Professor Emeritus of Political Science (1947).
A.B., Dickinson College, 1931; A.M., Columbia University, 1938; Ph.D., 1946.

JOSEPH H. SCHIFFMAN

James Hope Caldwell Professor Emeritus of American Studies and Professor Emeritus of English (1958).
B.A., Long Island University, 1937; M.A., Columbia University, 1947; Ph.D., New York University, 1951. *Lindback Award for Distinguished Teaching, 1961-62.*

HENRY L. YEAGLEY

The Joseph Priestley Professor Emeritus of Natural Philosophy, Professor Emeritus of Physics and Astronomy (1958).
B.S., Pennsylvania State University, 1925; M.S., 1927; Ph.D., 1934.

AMOS B. HORLACHER

Professor Emeritus of English (1947).
A.B., Wesleyan University, 1926; D.D., 1943; S.T.B., Union Theological Seminary, 1929; M.A., Columbia University, 1952; Ed.D., 1957; *Lindback Award for Distinguished Teaching, 1960-61.*

WILLIAM R. BOWDEN

Thomas Beaver Professor Emeritus of English Literature (1948).
A.B., Haverford College, 1935; A.M., Duke University, 1937; Ph.D., Yale University, 1948. *Lindback Award for Distinguished Teaching, 1974-75.*

CAROLINE H. KENNEDY

Professor Emerita of Modern Languages (1948).
A.B., Birmingham-Southern College, 1926; M.A., Alabama University, 1930; Docteur D'Université, Université Laval, 1942.

W. WRIGHT KIRK

Professor Emeritus of Modern Languages (1946).
A.B., University of Delaware, 1930; M.A., Middlebury College, 1935; Ph.D., University of Illinois, 1955.

FLINT KELLOGG

Boyd Lee Spahr Professor Emeritus of History (1946).
A.B., Bard College of Columbia University, 1931; M.A., Harvard University, 1933; L.H.D., Bard College, 1960; Ph.D., Johns Hopkins University, 1963.

FRANCIS W. WARLOW

Professor Emeritus of English (1947).
A.B., Johns Hopkins University, 1931;
M.A., University of Pennsylvania, 1946;
Ph.D., 1959.

ROGER E. NELSON

Professor Emeritus of Mathematics (1949).
B.S., U.S. Naval Academy, 1922; M.A.,
Dartmouth College, 1946.

RAY H. CRIST

Professor Emeritus of Chemistry (1963).
A.B., Dickinson College, 1920; Sc.D.,
1960; A.M., Columbia University, 1922;
Ph.D., 1926.

RICHARD M. SIA

Professor Emeritus of Physics (1954).
B.S., Northwestern University, 1928;
M.S., University of Chicago, 1932.

HENRY J. YOUNG

Charles A. Dana Professor Emeritus of History (1957).
A.B., Franklin and Marshall College,
1932; Ph.D., Johns Hopkins University,
1955.

WILLIAM H. BENSON

Associate Professor Emeritus of Mathematics (1955).
B.S., U.S. Naval Academy, 1925;
Graduate, U.S. Navy Post-Graduate
School, 1934.

ASA W. CLIMENHAGA

Associate Professor Emeritus of Education (1950).
A.B., Taylor University, 1919; M.A.,
Wittenberg University, 1940; Ed.D.,
Syracuse University, 1945.

HERBERT ROYCE

Associate Professor Emeritus of Modern Languages (1959).
Dr. rer. pol., University of Kaliningrad,
1926.

DAVID B. EAVENSON

Associate Professor Emeritus of Physical Education (1955).
B.S., Bucknell University, 1954.

CORDELIA M. NEITZ

Associate Professor Emerita of Library Resources (1963).
B.S. in L.S., Syracuse University, 1931;
M.S. in Ed., Temple University, 1968.

ALFRED N. HARTSHORN

Associate Professor Emeritus of English (1958).
A.B., University of Rochester, 1932;
A.M., 1957.

DOROTHY W. BOWERS

Associate Professor Emerita of Library Resources (1967).
B.A., Wilson College, 1963; M.S. in
L.S., Drexel University, 1967.

Teaching Faculty

DENNIS P. AKIN

Professor of Fine Arts, Chairman of the Department of Fine Arts (1969).
B.F.A., University of Kansas, 1956;
M.F.A., University of Colorado, 1958.
Lindback Award for Distinguished Teaching, 1976-77.

GEORGE ALLAN

Professor of Philosophy, Dean of the College, Russell I. Thompson Chair of the Dean of the College (1963).
B.A., Grinnell College, 1957; M.Div.,
Union Theological Seminary, 1960;
Ph.D., Yale University, 1963; *Lindback Award for Distinguished Teaching, 1968-69.*

BRUCE R. ANDREWS

Professor of Political Science (1960).
A.B., Syracuse University, 1950; Ph.D.,
1961.

PAUL F. M. ANGIOLILLO

Charles A. Dana Professor of French Language and Literature (1962).
A.B., Columbia University, 1938; A.M.
in French, Columbia University, 1939;
Ph.D., 1946; Postdoctoral Studies,
University of Geneva, 1946-47; Officier
d'Académie, 1956; Officier des Palmes
Académiques, 1961. *Lindback Award for Distinguished Teaching, 1964-65.*
Ganoe Award for Inspirational Teaching, 1974-75.

DIRECTORY

JO ANN E. ARGERSINGER

Instructor in History (1978).

B.A., University of Maryland, 1974;
M.A., George Washington University,
1976.

KATHLEEN W. BARBER

*Associate Professor of Physical Educa-
tion (1960).*

A.B., Syracuse University, 1947.

LEE W. BARIC

Professor of Mathematics (1964).

B.S., Dickinson College, 1956; M.S.,
Lehigh University, 1961; Ph.D., 1966.

BETTY M. BARNES

*Assistant Professor of Environmental
Science (1978).*

A.B., Winthrop College, 1950; M.A.,
Duke University, 1953; Ph.D., George-
town University, 1977.

CHARLES A. BARONE

*Assistant Professor of Economics
(1975).*

B.A., American University, 1971;
Ph.D., 1978.

DANIEL R. BECHTEL

*Professor of Religion, Chairman of the
Department of Religion (1964).*

A.B., Franklin and Marshall College,
1954; B.D., Yale University, 1958;
Ph.D., Drew University, 1964. *Lindback
Award for Distinguished Teaching,*
1969-70.

JOHN E. BENSON

*Charles A. Dana Professor of Chemistry
(1964).*

B.S., Pennsylvania State University,
1950; M.A., Princeton University,
1953; Ph.D., 1957.

PAUL J. BIEBEL

Professor of Biology (1963).

B.S., University of Notre Dame, 1949;
M.S., St. Louis University, 1955; Ph.D.,
Indiana University, 1963.

MARIANNA BOGOJAVLENSKY

*Professor of German and Russian Lan-
guage and Literature, Chairman of the
Department of German and Russian
(1963).*

M.A., University of Helsinki, 1939;
Ph.D., University of Pennsylvania,

1959. *Lindback Award for Distin-
guished Teaching, 1972-73; Canoe
Award for Inspirational Teaching,*
1977-78.

HARRY F. BOOTH

*Charles A. Dana Professor of Religion
(1964).*

A.B., Harvard College, 1949; S.T.B.,
Boston University, 1952; Ph.D., 1963.
*Lindback Award for Distinguished
Teaching, 1966-67. Canoe Award for
Inspirational Teaching, 1970-71.*

DONALD V. BOWIE**

Assistant Professor of English (1969).
B.A., Tufts University, 1967; M.A.,
Johns Hopkins University, 1969.

ANITA R. BRANDON

*Part-time Instructor in Woodwinds
(1976).*

B.M., Ithaca College, 1968; M.M.,
University of Arizona, 1972.

THOMAS BRENNAN

Assistant Professor of Biology (1978).
B.S., University of Illinois, 1965; M.S.,
Rutgers University, 1975; Ph.D., 1977.

DAVID BRUBAKER*

Professor of Drama (1956).

A.B., Franklin and Marshall College,
1948. *Lindback Award for Distin-
guished Teaching, 1967-68.*

CAROLINE A. BRUZELIUS*

Assistant Professor of Fine Arts (1977).
B.A., Wellesley College, 1971; M.A.,
Yale University, 1974; M.Phil., 1975;
Ph.D., 1977.

TRUMAN C. BULLARD*

Professor of Music (1965).

A.B., Haverford College, 1960; M.A.,
Harvard University, 1963; Ph.D., Uni-
versity of Rochester, 1971. *Lindback
Award for Distinguished Teaching,*
1970-71.

JAMES W. CARSON

Associate Professor of History (1956).
B.S. in Ed., Miami University, 1948;
M.A., 1951.

*On leave 1979-80.

**On leave Second Semester 1979-80.

ROBERT W. CAVENAGH, JR.
*Director of Instructional Media with
the rank of Assistant Professor (1972).*
A.B., Princeton University, 1965;
M.Ed., University of Virginia, 1970.

WALTER CHROMIAK
Instructor in Psychology (1979).
B.A., Temple University, 1974.

GREGORY L. CLEMENTS
Assistant Professor of Physics (1978).
B.A., University of Iowa, 1971; M.S.,
1976; Ph.D., 1978.

MARCIA B. CONNER
*Associate Professor of English, Chair-
woman of the Department of English
(1964).* B.A., Cornell College, 1947;
M.A., Columbia University, 1949.

OLGA F. VILLARES de CONNOR
Assistant Professor of Spanish (1978).
M.A., University of Pennsylvania, 1960.

STEPHEN B. COSLETT
Professor of Psychology (1960).
B.S., University of Pittsburgh, 1953;
M.A., University of Denver, 1957;
Ph.D., 1960.

DOROTHY W. CULP
Associate Professor of English (1970).
B.A., Muskingum College, 1952; M.A.,
University of Pennsylvania, 1956;
Ph.D., Columbia University, 1967.

PATRICK W. CUMMINGS
Professor of Military Science (1977).
B.S., Virginia Polytechnic Institute,
1960; M.S., George Washington Uni-
versity, 1970; Lieutenant Colonel,
Engineers Corps, U.S. Army.

SYLVIE G. DAVIDSON
Assistant Professor of French (1979).
Licence-ès-Lettres, Université de Mont-
pellier, 1967; Maitrise d' Italien, 1968;
Doctorat de Troisième Cycle, 1978.

GARY D. D'LAMATER
Assistant Professor of Education (1977).
B.A., University of New Mexico, 1969;
M.A., 1972; Ph.D., Arizona State Uni-
versity, 1975.

JOSEPH G. DuCHARME
*Associate Professor of Physical Educa-
tion (1955).*
B.S. in P.Ed., Ithaca College, 1948;
M.A. in P.Ed., New York University,
1951.

CYRIL W. DWIGGINS*
*Associate Professor of Philosophy
(1970).*
B.A., Aquinas Institute, 1955; M.A.,
1956; Ph.D., Northwestern University,
1978.

GEORGE ELLARD
*Assistant Professor of Philosophy
(1978).*
B.A., Fordham University, 1969;
M.Phil., Yale University, 1971, Ph.D.,
1973.

LARRY A. ENGBERG**
*Associate Professor of Psychology
(1973).*
B.S., Montana State University, 1968;
M.A., University of Colorado, 1972;
Ph.D., 1973.

JOSEPH H. ESCOVITZ
*Assistant Professor of Islamic Studies
(1979).*
B.A., Brandeis University, 1967; M.A.,
McGill University, 1975; Ph.D., 1978.

DOUGLAS P. FENNER
*Assistant Professor of Psychology
(1977).*
B.A., Reed College, 1971; Ph.D.,
University of Pennsylvania, 1976.

CATHERINE FERGUSON
Assistant Professor of French (1979).
A.B., Hunter College, 1961; M.A., Bryn
Mawr College, 1971; Ph.D., 1977.

FREDERICK P. FERRÉ
*Charles A. Dana Professor of Philos-
ophy, Chairman of the Department of
Philosophy, Secretary of the Faculty,
Mace Bearer (1962).*
A.B., Boston University, 1954; M.A.,
Vanderbilt University, 1955; Ph.D.,
University of St. Andrews, 1959.

DIRECTORY

*On leave 1979-80.

**On leave half-time 1979-80.

R. LEON FITTS

Associate Professor of Classical Studies, Chairman of the Department of Classical Studies (1972).

B.A., Baylor University, 1963; M.A., University of Georgia, 1967; Ph.D., Ohio State University, 1971. *Ganoe Award for Inspirational Teaching, 1976-77.*

DONALD W. FLAHERTY

Professor of Political Science (1952).

A.B., Syracuse University, 1943; Ph.D., 1954; *Lindback Award for Distinguished Teaching, 1977-78.*

ARTURO A. FOX**

Professor of Spanish (1966).

Bachelor of Letters and Sciences, The Friends School, Instituto Pre-universitario de Holguin (Cuba), 1952; Doctor en Derecho, University of Havana, 1960; Ph.D., University of Minnesota, 1971.

GEORGE FRIEDMAN

Assistant Professor of Political Science (1974).

B.A., City College of the City University of New York, 1970; M.A., Cornell University, 1973; Ph.D., 1976.

CLARKE W. GARRETT

Professor of History (1965).

B.A., Carleton College, 1956; M.S., University of Wisconsin, 1957; Ph.D., 1961.

WARREN J. GATES**

Robert Coleman Professor of History (1951).

A.B., Duke University, 1941; A.M., University of Pennsylvania, 1947; Ph.D., 1951.

KENWOOD E. GIFFHORN

Instructor in Military Science (1978).

B.A., University of Nebraska, 1971; M.S., Fitchburg State College, 1976; Major, Military Intelligence, U.S. Army.

ROSS B. GINGRICH

Instructor in Mathematics (1977).

B.A., Dickinson College, 1971; M.S., Rensselaer Polytechnic Institute, 1973.

WILBUR J. GOBRECHT

Associate Professor of Physical Education (1960).

A.B., Dickinson College, 1952; A.M., Duke University, 1959.

GLEN H. GOULD

Professor of Music (1979).

B.M., University of Southern California, 1949; M.M., Wayne State University, 1951; Ph.D., Indiana University, 1964.

HENRY W. A. HANSON, III*

Associate Professor of Geology (1966).

B.S., University of Alaska, 1960; M.S., Pennsylvania State University, 1965; Ph.D., 1968.

WILLIAM A. HARMS

Associate Professor of English (1968).

B.A., Hope College, 1961; M.A., Michigan State University, 1963; Ph.D., Indiana University, 1971.

FRANK R. HARTMAN

Associate Professor of Psychology (1960).

B.S., Pennsylvania State University, 1953; M.S., 1955; Ph.D., 1957.

CHARLES M. HARVEY*

Associate Professor of Mathematics (1972).

A.B., Harvard University, 1961; Ph.D., Stanford University, 1965.

JOHN S. HENDERSON

Associate Professor of French, Director of Off-Campus Studies (1966).

A.B., Bates College, 1961; M.A., Brown University, 1963; Ph.D., 1966.

SHARON L. HIRSH

Assistant Professor of Fine Arts (1974).

B.A., Rosemont College, 1970; M.A., University of Pittsburgh, 1971; Ph.D., 1974.

A. CRAIG HOUSTON

Professor of Economics, Chairman of the Department of Economics, Marshal of the College (1956).

A.B., Pennsylvania State University, 1951; Graduate School for English Speaking Students, University of

*On leave 1979-80.

**On leave Second Semester 1979-80.

Stockholm, 1952; Ph.D., Pennsylvania State University, 1962.

MARVIN ISRAEL

Associate Professor of Sociology (1968).
B.A., City College of New York, 1959.

CHARLES A. JARVIS

Associate Professor of History, Director of the Dickinson Center for European Studies in Bologna (1969).
B.A., DePauw University, 1963; M.A., University of Missouri, 1964; Ph.D., 1969.

WILLIAM B. JEFFRIES

Professor of Biology (1959).
B.S., University of Pittsburgh, 1949; M.A., University of North Carolina, 1952; Ph.D., 1955. *Lindback Award for Distinguished Teaching, 1964-65. Ganoë Award for Inspirational Teaching, 1975-76.*

ASHOK K. KAPOOR

Assistant Professor of Economics (1976).
B.A., University of Delhi, India, 1965; M.A., 1967; M.A., University of Minnesota, 1974; M.B.A., 1974.

JULIUS S. KASSOVIC

Instructor in Anthropology (1979).
B.A., University of California at Berkeley, 1971; M.A., 1977.

MELISSA B. KASSOVIC

Instructor in Anthropology (1978).
B.A., University of California at Berkeley, 1970; M.A., 1975.

VYTAUTAS M. KAVOLIS

Charles A. Dana Professor of Comparative Civilizations and Professor of Sociology (1964).
B.A., University of Wisconsin, 1952; M.A., Harvard University, 1956; Ph.D., 1960.

JOSEF M. KELLINGER

Professor of German (1979).
A.B., Capital University, 1941; M.A., Ohio State University, 1942; Ph.D., Syracuse University, 1952.

VICTOR C. KENDALL

Part-time Instructor in Music (1979).
A.B., Dickinson College, 1973; M.A., University of Washington, 1975.

PETER G. KIMMEL

Assistant Professor of Geology (1979).
B.S., Oregon State University, 1973; M.S., University of Michigan, 1975; Ph.D., 1979.

JOHN L. KING*

Associate Professor of Accounting (1959).
B.A., Princeton University, 1948; M.A., University of Denver, 1950. *Ganoë Award for Inspirational Teaching, 1971-72.*

MICHAEL B. KLINE

Associate Professor of French (1968).
B.A., Rutgers University, 1961; M.A., Brown University, 1962; Ph.D., 1971.

ALLEN KRANTZ

Part-time Instructor in Guitar and Lute (1976).
B.M., San Francisco Conservatory of Music, 1974; M.A., Stanford University, 1976.

DAVID L. KRANZ

Assistant Professor of English (1979).
B.A., Princeton University, 1964; M.A., University of California at Berkeley, 1971; Ph.D., 1977.

HARRY D. KREBS*

Associate Professor of Comparative Civilizations (1972).
B.A., University of Nebraska, 1963; M.A., Temple University, 1974; Ph.D., 1978.

RICHARD M. LANE

Associate Professor of Biology, Chairman of the Department of Biology (1967).
B.S., Loyola College, 1959; M.S., University of Maryland, 1963; Ph.D., 1969.

KENNETH L. LAWS

Professor of Physics (1962).
B.S., California Institute of Technology, 1956; M.S., University of Pennsylvania, 1958; Ph.D., Bryn Mawr College, 1962.

DIRECTORY

*On leave 1979-80.

PRISCILLA W. LAWS
Professor of Physics (1965).
B.A., Reed College, 1961; M.A., Bryn Mawr College, 1963; Ph.D., 1966.

SANDRA S. LEHMAN
Instructor in Physical Education (1976).
B.S., Western Maryland College, 1975; M.Ed., 1976.

ROBERT E. LEYON
Associate Professor of Chemistry, Chairman of the Department of Chemistry, (1969).
B.A., Williams College, 1958; M.A., Princeton University, 1960; Ph.D., 1962.

JOHN H. LIGHT
Professor of Mathematics (1959).
B.S., Lebanon Valley College, 1948; M.S. in Physics, Pennsylvania State University, 1950; M.S. in Engr. Mech., 1957.

PHILIP N. LOCKHART
Professor of Classical Languages, Asbury J. Clarke Chair of Latin, Parliamentarian of the Faculty (1963).
B.A., University of Pennsylvania, 1950; M.A., University of North Carolina, 1951; Ph.D., Yale University, 1959. Gano Award for Inspirational Teaching 1968-69; 1972-73.

HOWARD C. LONG*
Professor of Physics, Joseph Priestley Chair of Natural Philosophy (1959).
A.B., Northwestern University, 1941; Ph.D., Ohio State University, 1948. Lindback Award for Distinguished Teaching, 1975-76.

BARRY A. LOVE
Assistant Professor of Economics (1978).
B.A., Rutgers University, 1966; M.R.P., University of North Carolina, 1968; Ph.D., University of Virginia, 1978.

JOHN W. LUETZELSCHWAB
Associate Professor of Physics, Chairman of the Department of Physics and Astronomy (1968).

A.B., Earlham College, 1962; M.A., Washington University, 1968; Ph.D., 1968.

KAREN P. MAJOR
Assistant Professor of Education (1978).
B.S., Chestnut Hill College, 1970; M.S., Hofstra University, 1972; Ph.D., 1978.

LONNA M. MALMSHEIMER
Associate Professor of American Studies, Director of the American Studies Program (1975).
B.A., Pennsylvania State University, 1962; M.A., 1965; Ph.D., University of Minnesota, 1973.

VICTOR J. MARMA
Assistant Professor of Mathematics (1977).
B.E.E., Rensselaer Polytechnic Institute, 1957; M.A., 1958; M.S., Harvard University, 1962; Ph.D., 1967.

PETER E. MARTIN
Professor of Mathematics (1965).
B.A., Yale University, 1950; M.A., Harvard University, 1951; Ph.D., 1958.

ENRIQUE J. MARTINEZ-VIDAL
Professor of Romance Languages, Chairman of the Department of Spanish and Italian (1965).
M.A., Temple University, 1960; Ph.D., University of Pennsylvania, 1970.

ANN H. MATHEWS
Part-time Instructor in Voice (1970).
B.Mus., Peabody Conservatory of Music, 1969; M.Mus., 1971.

BARBARA B. McDONALD
Professor of Biology (1956).
B.S., Simmons College, 1948; M.A., Columbia University, 1955; Ph.D., 1957.

DANIEL J. McDONALD
Professor of Biology (1956).
B.S., Siena College, 1950; M.A., Columbia University, 1952; Ph.D., 1955.

GARY L. McDOWELL
Assistant Professor of Political Science (1979).

*On leave First Semester 1979-80.

B.A., University of South Florida, 1972; M.A., Memphis State University, 1974; M.A., University of Chicago, 1978.

JOSEPH E. McEVOY
Assistant Professor of Physical Education (1979).

B.S., Springfield College, 1969; M.P.E., 1970; D.P.E., 1975.

NANCY C. MELLERSKI
Instructor in French (1977).

B.A., State University of New York at Binghamton, 1966; M.A., University of Toronto, 1968.

WILLIAM J. NICKEY*
Assistant Professor of Physical Education (1966).

B.S., West Chester State College, 1957; M.Ed., 1968.

JEFFREY W. NIEMITZ
Assistant Professor of Geology (1977).
B.A., Williams College, 1972; Ph.D., University of Southern California, 1977.

K. ROBERT NILSSON
Professor of Political Science (1962).
B.A., Temple University, 1951; M.A., Johns Hopkins University, 1957; Ph.D., Columbia University, 1964. Certificate of the Institute on International and Comparative Law, 1974. *Lindback Award for Distinguished Teaching*, 1963-64.

SHARON J. O'BRIEN
Assistant Professor of English (1975).
B.A., Radcliffe College, 1967; M.A., Harvard University, 1969; Ph.D., 1975.

JOHN M. OSBORNE
Instructor in History (1979).
B.A., Rice University, 1974; M.A., Stanford University, 1976.

PONG-HI PARK
Instructor in Piano (1969).
B.A., Seoul National University, College of Music, 1965; M.A., Peabody Conservatory of Music, 1966; Artist Diploma, 1967.

E. ROBERT PAUL
Coordinator of Academic Computing with the rank of Assistant Professor in the History of Science (1976).

B.S., Brigham Young University, 1966; M.S., 1971; M.A., Indiana University, 1974; Ph.D., 1976.

MORRIS K. PERINCHIEF
Assistant Professor of Fine Arts (1979).
A.B., University of Delaware, 1963; M.A., University of Chicago, 1970; Ph.D., University of Wisconsin, 1974.

FRED C. PETTY
Associate Professor of Music (1971).
B.Mus., Texas Christian University, 1961; M.A., Cornell University, 1964; Ph.D., Yale University, 1971.

RICHARD A. PFAU
Assistant Professor of History (1975).
A.B., Hamilton College, 1964; M.A., University of Virginia, 1973; Ph.D., 1975.

J. FORREST POSEY, JR.
Associate Professor of Music, (1962).
B.Mus., Hardin-Simmons University, 1951; M.Mus., University of Texas, 1954; M.A., Harvard University, 1962.

NOEL POTTER, JR.
Associate Professor of Geology, Chairman of the Department of Geology (1969).
A.B., Franklin and Marshall College, 1961; M.A., Dartmouth College, 1963; Ph.D., University of Minnesota, 1969. *Lindback Award for Distinguished Teaching*, 1978-79.

JUTTA RAMIN
Assistant Professor of German (1979).
Ph.D., Johns Hopkins University, 1977.

THOMAS L. REED, JR.
Assistant Professor of English (1977).
B.A., Yale University, 1969; M.A., University of Virginia, 1971; Ph.D., 1978.

GEORGE N. RHYNE*
Associate Professor of History (1965).
A.B., Davidson College, 1961; M.A., University of North Carolina, 1963; Ph.D., 1968.

DIRECTORY

*On leave Second Semester 1979-80.

LYNN S. ROBERTSON**

Assistant Professor of Psychology (1976).

B.S., Cornell University, 1971; M.S., University of Wisconsin, 1973; Ph.D., 1977.

DIETER J. ROLLFINKE*

Associate Professor of German (1964).

B.S., Rensselaer Polytechnic Institute, 1963; M.A., Columbia University, 1966; Ph.D., Johns Hopkins University, 1977.

GERALD C. ROPER

Professor of Chemistry (1962).

A.A., Boston University, 1953; B.A., 1956; Ph.D., 1966.

KENNETH M. ROSEN

Associate Professor of English (1969).

B.A., Cornell University, 1959; M.A., San Francisco State University, 1964; Ph.D., University of New Mexico, 1969.

S. NED ROSENBAUM

Associate Professor of Religion and Classics (1970).

B.A., Tulane University, 1961; M.A., Brandeis University, 1967; Ph.D., 1974.

ELLEN ROSENMAN

Instructor in English (1979).

B.A., Bryn Mawr College, 1973.

EUGENE J. ROSI

Professor of Political Science, Chairman of the Department of Political Science (1965).

B.A., Syracuse University, 1952; M.A., 1953; Diploma, Johns Hopkins School of Advanced International Studies (Bologna), 1958; Ph.D., Columbia University, 1964. *Ganoe Award for Inspirational Teaching*, 1969-70.

J. MARK RUHL

Assistant Professor of Political Science (1975).

B.A., Dickinson College, 1970; M.A., Syracuse University, 1972; Ph.D., 1975.

WILLIAM R. SCHEARER

Associate Professor of Chemistry (1968).

B.S., Ursinus College, 1957; M.A., Princeton University, 1959; Ph.D., 1963.

RICHARD SCIACCA***

Instructor in Economics (1978).

B.A., State University of New York at Binghamton, 1974; M.A., Cornell University, 1978.

H. WADE SEAFORD, JR.

Associate Professor of Anthropology, Chairman of the Department of Sociology-Anthropology (1961).

A.B., Wheaton College, 1946; Graduate Studies, Escuela Nacional de Antropología e Historia (Mexico), 1948-50; A.M., Harvard University, 1964; Ph.D., 1971.

HELEN R. SEGALL

Associate Professor of Russian (1976).

B.S., Simmons College, 1954; Ph.D., Bryn Mawr College, 1974.

DONALD R. SEIBERT

Associate Professor of Physical Education (1957).

B.S., George Washington University, 1943; M.A., Columbia University, 1950.

RICHARD M. SHEELEY

Associate Professor of Chemistry (1969).

B.S., University of Utah, 1957; M.S., Pennsylvania State University, 1959; Ph.D., Brigham Young University, 1964.

ROBERT D. SIDER

Professor of Classical Languages (1968).

B.A., University of Saskatchewan, 1955; M.A., 1956; B.A., Oxford University, 1958; M.A., 1964; Ph.D., 1965. *Lindback Award for Distinguished Teaching*, 1973-74. *Ganoe Award for Inspirational Teaching*, 1978-79.

*On leave Second Semester 1979-80.

**On leave 1979-80.

***On leave First Semester 1979-80.

RALPH L. SLOTTEN

Professor of Religion (1966).

B.A., Drake University, 1948; B.D., 1951; M.A., University of Chicago, 1958; Ph.D., 1966.

T. SCOTT SMITH

Associate Professor of Physics (1969).

A.B., Princeton University, 1963; Ph.D., University of Maryland, 1967.

BARBARA S. ŠPEAR

Instructor in Drama (1979).

A.B., Dickinson College, 1974; M.A., University of North Carolina, 1975.

JACK R. STODGHILL

*Associate Professor of Mathematics
Chairman of the Department of Mathematics (1967).*

A.B., Wabash College, 1957; M.S., Purdue University, 1960; M.S., Florida State University, 1975; Ph.D., Brown University, 1971.

CARL A. STRANG

Assistant Professor of Biology (1976).

B.S., Purdue University, 1973; Ph.D., 1976.

ANDRÉS SURÍS

*Associate Professor of Spanish (1973).
Licenciado en Derecho, Universidad de Barcelona, 1941; M.A., University of Minnesota, 1968; Ph.D., 1972.*

CANDADAI K. TIRUMALAI

Professor of English (1967).

B.A., Osmania University, India, 1957; M.A., 1959; Ph.D., University of Pennsylvania, 1969. *Lindback Award for Distinguished Teaching, 1971-72. Gano Award for Inspirational Teaching, 1973-74.*

WILLIAM W. VERNON

Professor of Geology (1957).

B.A., University of New Hampshire, 1952; M.S., Lehigh University, 1955; Ph.D., 1964. *Lindback Award for Distinguished Teaching, 1966-67.*

LEE ANN WAGNER

Assistant Professor of Physical Education (1952; 1966).

B.S., Pennsylvania State University, 1948.

RICHARD H. WANNER

Professor of Psychology, Chairman of the Department of Psychology and Education (1946; 1961).

A.B., Franklin and Marshall College, 1939; Ed.M., Harvard University, 1940; Ed.D., 1968.

DAVID L. WATKINS

Associate Professor of Physical Education, Chairman of the Department of Physical Education (1967).

B.S., Pennsylvania State University, 1958; M.A., University of Iowa, 1961.

STEPHEN WEINBERGER

Associate Professor of History, Chairman of the Department of History (1969).

B.A., Northeastern University, 1965; M.A., University of Wisconsin, 1966; Ph.D., 1969.

NEIL B. WEISSMAN

Assistant Professor of History (1975).

B.A., Colgate University, 1970; M.A., Princeton University, 1972; Ph.D., 1976.

CANDIE C. WILDERMAN*

Instructor in Environmental Science (1974).

B.S., Tufts University, 1968; M.A., Harvard University, 1969.

ROBERT P. WINSTON

Assistant Professor of English (1979).

A.B., Bates College, 1972; M.A., University of Wisconsin, 1973; Ph.D., 1979.

WILLIAM H. WISHMEYER

Professor of English (1957).

B.A., Johns Hopkins University, 1948; M.A., 1949; Ph.D., University of Pennsylvania, 1957.

NEIL S. WOLF

Associate Professor of Physics (1967).

B.S., Queens College, 1958; M.S., Stevens Institute of Technology, 1960; Ph.D., 1966.

DIRECTORY

*On leave 1979-80.

Faculty Support

CHARLES M. HUPPMAN
Assistant to the Professor of Military Science (1977).
B.A., Loyola College, 1968; Captain, Military Police, U.S. Army.

BENNIE B. JAMERSON
Assistant to the Professor of Military Science (1979).
B.B.A., University of Arkansas, 1971; Captain, Artillery, U.S. Army.

Library

JOAN M. BECHTEL
Librarian (1971).
A.B., Wilson College, 1955; M.S. in L.S., Drexel University, 1971.

DOROTHY H. CIESLICKI
Associate Professor of Library Resources, Chairwoman of the Department of Library Resources (1967).
B.S., Bucknell University, 1946; M.S. in L.S., Columbia University, 1967.

ELLEN A. DEREY
Librarian (1979).
B.A., University of Colorado, 1974; M.A., Pennsylvania State University, 1978; M.L.S., University of Pittsburgh, 1979.

RHEBA P. DUPRAS
Assistant Professor of Library Resources (1977).
B.A., Marietta College, 1973; M.A., State University of New York at Bing-

JOSEPH M. MANCUSO, JR.
Assistant to the Professor of Military Science (1978).
B.S., Duquesne University, 1968; Captain, Infantry, U.S. Army.

JAMES B. SHEEHAN-DRAKE
Technical Director for the Mermaid Players (1974).
B.A., Dickinson College, 1970.

hamton, 1975; M.S. in L.S., University of Kentucky, 1977.

YATES M. FORBIS*
Associate Professor of Library Resources (1965).
B.S., Appalachian State Teachers College, 1951; M.A., 1955; M.S. in L.S., Columbia University, 1960.

MARTHA C. SLOTTEN
Curator of Special Collections, Archivist of the College (1974).
B.A., Earlham College, 1943; M.A., University of Wisconsin, 1950.

LAWRENCE J. M. WILT
Assistant Professor of Library Resources (1977).
B.A., State University of New York at Binghamton, 1970; M.A., Indiana University, 1975; M.L.S., 1977.

ISINGARD M. WOODWORTH
Assistant Professor of Library Resources (1969).
A.B., University of California at Berkeley, 1968; M.L.S., 1969.

*On leave 1979-80.

College Services

Office of the President

Sam A. Banks
The President of the College, Lemuel T. Appold Foundation (1975).

A.B., Duke University, 1949; M.Div., Emory University, 1952; Ph.D., University of Chicago, 1971; Litt.D., College of Charleston, 1976.

M. Charles Seller
Executive Assistant to the President (1975).

A.B., Dickinson College, 1955; M.A., Pennsylvania State University, 1963.

George Shuman, Jr.
Vice President Emeritus, Development Officer (1935).

Ph.B., Dickinson College, 1937; LL.D., Lycoming College, 1958.

Benjamin D. James
Richard V. C. Watkins Professor Emeritus of Psychology and Education, Presidential Representative (1941).

A.B., Dickinson College, 1934; M.A., Bucknell University, 1936; Ph.D., University of Pennsylvania, 1962; LL.D., Dickinson School of Law, 1976.

COMPUTER CENTER

Thomas W. Burtnett
Director of the Computer Center (1976).
B.S. in E.E., Pennsylvania State University, 1964; M.S. in E.E., Case Western Reserve University, 1965.

E. Robert Paul
Coordinator of Academic Computing with the rank of Assistant Professor in the History of Science (1976).
B.S., Brigham Young University, 1966; M.S., 1971; M.A., Indiana University, 1974; Ph.D., 1976.

Robert A. Riley
Coordinator of Administrative Computing.
B.S., Elizabethtown College, 1976.

OFFICE OF ADMISSIONS

J. Larry Mench
Director of Admissions (1974).
B.A., Oberlin College, 1962; M.A., 1963.

R. Russell Shunk
Associate Director of Admissions (1976).
A.B., Lafayette College, 1965; M.A., Lehigh University, 1966.

James M. Reilly
Assistant Director of Admissions (1977).
A.B., Dickinson College, 1977.

Kyle R. Stewart
Assistant Director of Admissions (1978).
A.B., Dickinson College, 1978.

Division of Academic Affairs

George Allan
Dean of the College, Russell I. Thompson Chair of the Dean of the College, Professor of Philosophy (1963).

B.A., Grinnell College, 1957; B.D., Union Theological Seminary, 1960; Ph.D., Yale University, 1963. *Lindback Award for Distinguished Teaching, 1968-69.*

Ronald E. Doernbach
Registrar (1974).
A.B., Dickinson College, 1965.

Susan F. Nichols
Assistant Dean of the College (1977).
B.A., State University of Iowa, 1960; M.A., 1967.

Margaret D. Garrett
Assistant to the Dean of the College, Director of Continuing Education, Director of the Summer School (1976).
B.S., Illinois State University, 1957; M.A., Northwestern University, 1971; Ph.D., George Washington University, 1978.

John S. Henderson
Director of Off-Campus Studies, Associate Professor of French (1966).
B.A., Bates College, 1961; M.A., Brown University, 1963; Ph.D., 1966.

Robert W. Cavenagh, Jr.
Director of Instructional Media with the rank of Assistant Professor (1972).
A.B., Princeton University, 1965; M.Ed., University of Virginia, 1970.

Division of Educational Services

Leonard S. Goldberg
Dean of Educational Services (1977).

DIRECTORY

B.A., State University of New York at Oswego, 1964; M.A., Ohio State University, 1966; Ph.D., 1969.

Mary Watson Carson
Associate Dean of Special Programs, The George Metzger Chair of the Dean of Women (1968).

B.A., Wichita State University, 1959; M.A., 1960.

R. Bruce Wall
Associate Dean of Residential Services (1977).

A.B., Dickinson College, 1970; M.A., Bowling Green State University, 1975.

Howard E. Figler
Director of Counseling and Placement (1970).

A.B., Emory University, 1960; M.B.A., New York University, 1961; Ph.D., Florida State University, 1968.

Wanda L. Ruffin
College Counselor (1978).
B.S., Mississippi Valley State University, 1972; M.S.W., University of Pittsburgh, 1976.

Anne S. Abrams
Director of Holland Union Building and Coordinator of Campus Activities (1979).

B.A., State University of New York at Fredonia, 1974; M.A., University of Kansas, 1977.

Donald V. Raley
Director of Financial Aid (1977).
B.A., Blackburn College, 1960; M.A., University of Colorado, 1967.

M. Jane Hunsecker
Assistant Director of Financial Aid (1979).
B.A., College Misericordia, 1972; M.S., Shippensburg State College, 1977.

David L. Watkins
Chairman and Director of Curricular Instruction, Department of Physical Education, Associate Professor of Physical Education (1967).
B.S., Pennsylvania State University, 1958; M.A., University of Iowa, 1961.

Joseph G. DuCharme
Director of Men's Athletics, Associate Professor of Physical Education (1955).
B.S. in P.Ed., Ithaca College, 1948; M.A. in P.Ed., New York University, 1951.

Kathleen W. Barber
Director of Women's Athletics, Associate Professor of Physical Education (1960).
A.B., Syracuse University, 1947.

Donald R. Seibert
Director of Intramurals and Recreation, Associate Professor of Physical Education (1957).
B.S., George Washington University, 1943; M.A., Columbia University, 1950.

Robert A. Hollen
College Physician (1965).
B.A., Pennsylvania State University, 1954; M.D., Temple University, 1958.

Harold G. Kretzing
College Physician (1965).
B.S., Albright College, 1955; M.D., Temple University, 1959.

Esther M. Bushey, R.N.
Director, Health Center (1960).

Annette G. Wymond, R.N.
Assistant Director, Health Center (1964).

Division of Business and Financial Affairs

James M. Nicholson
Treasurer (1978).
B.A., Cornell College, 1959.

Barry L. Gaal
Business Manager (1971).
B.S., Moravian College, 1961.

Robert W. Belyea
Comptroller, Assistant Treasurer (1968).
B.A., Colby College, 1951.

Harold S. Fraker, Jr.
Assistant Comptroller (1979).
B.S., Shippensburg State College, 1974.

Robert H. Rasch
Director of Personnel and Summer Conferences (1973).
B.S., University of Rhode Island, 1965;
M.B.A., Western New England College,
1973.

Howard G. Baum
Director of Auxiliary Services (1964).
A.B., Dickinson College, 1950.

George L. Eurich
Director of Physical Plant (1970).

Wayne M. Modny
Director of Food Services (1974).

Ernest E. Talbot
Supervisor of Campus Security (1971).

Division of Communications and Development

Leonard G. Doran
*Executive Director of Communications
and Development (1973).*
B.A., Harvard University, 1942; M.A.,
George Washington University, 1949.

J. Brooks Jones
Director of Development (1974).
B.A., West Virginia Wesleyan College,
1962.

George F. Stehley
*Director of Alumni Relations and
Alumni Secretary (1970).*
A.B., Dickinson College, 1962.

Peter B. Shultzabarger
*Assistant Director of Development
(1978).*
B.A., West Virginia Wesleyan College,
1968; M.Div., Garrett Theological
Seminary, 1971.

Nancy Lee Winkelman
Director of Publications (1975).
B.A., Western Maryland College,
1951; M.Ed., 1969.

John E. Ross
*Director of Public Information Services
(1976).*
B.S., East Tennessee State University,
1969.

CENTRAL PENNSYLVANIA CONSORTIUM

Beverley D. Eddy
Director
B.A., College of Wooster, 1962; M.A.,
Indiana University, 1964; Ph.D., 1970.

DIRECTORY

Board of Advisors

The purposes of the Board of Advisors are to provide consultation and advice to the president of the College and to the Board of Trustees in matters relating to the total educational program, the development of the College's physical and financial resources, and the securing of highest quality students for admission to the College. Alumni, parents of present or former students, and other individual friends of the College are eligible for membership. Appointments to the Board of Advisors are made by the president of the Board of Trustees.

Mrs. Mary Ann Spence Altman '51
President, Altman and Weil, Inc.
Ardmore, Pa. 19003

Mr. Joseph D. Brenner '39
President, AMP, Inc.
Harrisburg, Pa. 17101

Col. C. Paul Burtner, Jr. (Ret.) '41
Potomac, Md. 20854

Mr. Philip C. Capice '52
Lorimar Productions, Inc.
Burbank, Ca. 91522

Mr. Fred J. Charley '38
President, Charley Bros. Co.
Greensburg, Pa. 15601

Mr. Homer C. Earll
President, Earll Forest Products, Inc.
Baltimore, Md. 21210

Dr. Jesse J. Hymes '33
Mount Vernon, N.Y. 10552

Ambassador Carol C. Laise
(Mrs. Ellsworth Bunker)
Washington, D.C. 20016

Samuel J. McCartney, Jr. '41
Atlanta, Ga. 30345

Mr. Edward K. Masland '54
President, Carlisle Container
Company
Carlisle, Pa. 17013

Dr. Meyer P. Potamkin '32
President, Boulevard Mortgage
Company
Philadelphia, Pa. 19149

Dr. Wilbur Rabinowitz '40
President, J. Rabinowitz & Sons, Inc.
Brooklyn, N.Y. 11237

Mrs. Inge Paul Stafford '58
Essex Fells, N.J. 07021

Mr. Harrison M. Symmes
Mount Vernon, Va. 22121

Dr. John V. Thornton (Chairman)
Executive Vice President-Finance
Consolidated Edison Company of
New York, Inc.
New York, N.Y. 10003

Mr. Ralph M. Whitticar
Whitticar, Sokol & Ledbetter
Fredericksburg, Va. 22401

Mr. Robert J. Wise '53
President, Key Point Corporation
Berwick, Pa. 18603

Mr. Ray L. Wolfe
President, Farmers Trust Company
Carlisle, Pa. 17013

Alumni Council

Term Expires 1980

Dorothy Harpster '28, Shippensburg
Mrs. Lenore S. Caldwell '49, Harrisburg
Charles W. Howell '51, Carlisle

Bonnie D. Menaker, Esq. '61, Harrisburg
Mrs. Barbara R. Strite '61, Gettysburg
James F. Jorden, Esq. '63, Vienna VA
Andrew C. Hecker, Jr., Esq. '65,
Philadelphia, (President)
John C. Goodchild, Jr. '67, Wayne
Rosalyn K. Robinson, Esq. '68, Phila-
delphia (Vice President)
James Gerlach '77, Carlisle

Term Expires 1981

Lester T. Etter '34, Carlisle (Secretary)
Herschel E. Shortlidge '34, Drexel Hill
Mrs. Margaret B. Burtner '41,
Potomac MD
Mrs. Sally S. Small '51, West Lawn
John E. Colburn '52, Media
J. Bruce McKinney '59, Hershey
Eric Drake '70, Carlisle
David R. Witwer '71, Chicago IL
Katharine E. Bachman, Esq. '75,
Somerville MA
Richard A. Burnett '78, Carlisle

Term Expires 1982

Mrs. Ruth S. Spangler '35, Harrisburg
Austin Bittle '39, Phoenix MD
Ellis E. Stern, Jr. '49, Coatesville
Mrs. Rosalie E. Dunkle '50, Harrisburg
Mrs. Virginia M. Rahal '52, Carlisle
Dr. John M. Kohlmeier, Jr. '56,
Northbrook IL
William M. Gormly '63, Phoenix AZ
Jace J. Wagner '79, Allentown

Parents Advisory Council

The following is a list of Dickinson's Parents Advisory Council members. These are parents who serve as liaison between the College administration and the general parent body. They have agreed to act as informal admissions representatives of Dickinson. Please feel free to contact any person on the list if you desire more in-depth information about the College from a parent's perspective.

CONNECTICUT

Old Greenwich
Mr. and Mrs. Harry C. Rubicam

Orange
Mr. and Mrs. Allan K. Poole, Jr.
Waterbury
Mr. and Mrs. Harrison D. Bonner
Weston
Mr. and Mrs. William S. Gemmell
Westport
Mr. and Mrs. Warren R. Harrop

DELAWARE

Wilmington
Mr. and Mrs. Dimitri Andriadis
Mr. and Mrs. Thomas C. Shea, Jr.

ILLINOIS

Glencoe
Mr. and Mrs. Albert J. Nader
Winnetka
Mr. and Mrs. J. Grant Beadle
Mr. and Mrs. David N. Hilton

LOUISIANA

New Orleans
Dr. Herbert E. Kaufman

MARYLAND

Annapolis
Mr. and Mrs. Cornelius C. Bond
Baltimore
Dr. and Mrs. Eduard Ascher
Mr. and Mrs. Robert M. Hankin
Mr. and Mrs. Carl A. Ten-Hoopen
Bethesda
Mr. David H. Moran
Mrs. Rachel Brandenburg-Moran
Mr. and Mrs. Douglas Whittemore
Pikesville
Dr. and Mrs. Irving Kramer
Silver Spring
Mr. and Mrs. Leonard M. Wagman
Timonium
Mr. and Mrs. Edward F. Ebert, Jr.

MASSACHUSETTS

Arlington
Mr. and Mrs. Kenneth C. Spengler
Shrewsbury
Dr. and Mrs. Harold W. Stuart, Jr.

NEW HAMPSHIRE

New Boston
Mr. and Mrs. Horton Foote

NEW JERSEY

Absecon
Mr. and Mrs. Francis J. Blee
Cinnaminson
Mr. and Mrs. Bruce Oxman
Morristown
Mr. and Mrs. Thomas S. Hamill
Princeton
Mr. and Mrs. Robert C. Forrey
Mr. and Mrs. Richard C. Reynolds
Rumson
Mr. and Mrs. James M. Kyte, Jr.

NEW YORK

Elsmere
Mr. and Mrs. Vincent L. O'Leary
Glens Falls
Mr. and Mrs. John Bishop
New City
Mr. and Mrs. Arthur W. Harckham
New York City
Mr. and Mrs. Joseph B. Rosenblatt
Mr. and Mrs. Donald W. Swinton
Plainview
Mr. and Mrs. Louis H. Pighi

PENNSYLVANIA

Camp Hill
Dr. and Mrs. Stephen J. Herceg
Etters
Mr. and Mrs. John G. Williams
Gladwyne
Dr. and Mrs. Thomas M. Devlin
Mr. and Mrs. Kenneth A. B. Trippe
Kennett Square
Mr. and Mrs. Irvin S. Lieberman
Lansdale
Mr. and Mrs. Stephen Loidl, Jr.
Mifflintown
Mr. and Mrs. H. Brown Fry
Narberth
Mr. and Mrs. Samuel Saligman
Swarthmore
Mr. and Mrs. Richard J. Taylor
York
Mr. and Mrs. Burton W. Kniseley

VIRGINIA

Annandale
Mr. and Mrs. Porter Kier
Salem
Mr. and Mrs. John R. Turbyfill

DIRECTORY

ACADEMIC REGULATIONS*

Class Designation

The freshman, sophomore, and junior years are normally interpreted as the first, second, and third college years of attendance as a regular student. A student will be registered as a sophomore when eight courses creditable toward graduation are completed, as a junior when 16 courses creditable toward graduation are completed, and as a senior when 24 courses creditable toward graduation are completed.

In the case of a student entering Dickinson with advanced standing because of work done at other institutions, the registrar will determine status as to class. In all other cases involving such irregularities as work done outside the Dickinson College year, the dean of the college will determine the student's class.

Classification of Students

A *matriculated* student is one who has been formally enrolled at the College as a degree candidate. A *non-matriculated* student is one who has not been formally admitted as a degree candidate. A *full-time* student is one who carries a minimum of three courses. The maximum course load for a student is 5½ courses unless permission for an overload is received from the Committee on Academic Standards. A *part-time* student is one

who is carrying less than a full-time academic load.

Normally, a degree candidate will be a full-time student. A degree candidate who desires part-time status must have the approval of the registrar, who may seek the advice of the Committee on Academic Standards in unusual circumstances. A non-degree student who desires full-time status must have the approval of the director of admissions, who may seek the advice of the Committee on Admissions and Financial Aid in unusual circumstances. Approval for these categories of status may be for a semester or a year, and is renewable.

A non-degree student who desires to become a degree candidate must receive the approval of the Committee on Admissions and Financial Aid. In seeking such approval, the student must submit all transfer credit taken to date that the student plans to apply toward the Dickinson degree. In general, a student must meet all the requirements for graduation in effect at the time of acceptance, including being accepted as a major by some department by the time 22 courses have been completed. Failure to be accepted as a major entails required withdrawal from the College without the privilege of readmission. In addition, a non-degree student must meet the same requirement as a transfer student, i.e., the student must complete 17 courses on campus, the last 12 of which must be taken while the student is matriculated with an approved major field of concentration.

1. *Full-time matriculated*

Students who are enrolled as degree candidates and are carrying a minimum course load of three courses are full-time matriculated.

*Changes in Regulations: The College reserves the right to change its regulations, courses of study, and schedule of fees without previous notice to the student.

2. *Part-time matriculated*

Students who are enrolled as degree candidates and are carrying fewer than three courses are part-time matriculated. This status requires approval as described above.

3. *Consortium Exchange Students*

Students in good standing at one of the Central Pennsylvania Consortium colleges and enrolled in one or more Dickinson courses are Consortium Exchange students. Registration for these students is conducted by the Office of Off-Campus Studies.

4. *Guest Students*

Students from other institutions, abroad or in this country, who have been given permission to register for one semester or one year by the Admissions Office are guest students. These students register at the beginning of each registration during the time allotted to special registrants.

5. *High School Enrichment Program*

Upon the recommendation of their high school guidance counselor, promising high school students may elect to augment their high school program by enrolling in up to two courses per semester at Dickinson. Information about course offerings and assistance is provided by the Office of Academic Affairs.

6. *Students in Continuing Education*

This program is designed for adults who seek to return to study on a part-time basis. Normally students in continuing education will have been away from the formal education process for a year. Registration for these students is limited to two courses in the regular curriculum each semester and is conducted through the Office of Continuing Education.

7. *In absentia*

This status may be granted for one semester, or one year. Students who return on schedule do not need to apply for formal readmission. Students who do not provide due notice (60 days) of change in the date of expected return or who are not granted an extension of the return date must apply for formal readmission. Students may transfer to Dickinson up to one full year of academic work, if prior approval of the program has been granted by the director of off-campus studies.

A student participating in off-campus study programs specifically associated with or approved by the College is granted *in absentia* status upon acceptance into the program. These programs are: Center for European Studies in Bologna; the semester programs at American University in Washington; Asian Studies at the University of Pennsylvania; Institute of European Studies; the Colombia Program; the India Semester; the Israel Program; the Harrisburg Urban Semester; Binary Engineering Programs.

ACADEMIC REGULATIONS

A student planning to participate in programs of study not among those specifically associated with or approved by the College must apply for *in absentia* status and must secure prior approval of the program of study from the director of off-campus studies. A student in this status does not register or pay tuition and fees as a Dickinson student.

8. Leave of absence

This status may be granted for one semester or one year by the office of student services and the office of academic affairs and is subject to renewal. Students who return on schedule do not need to apply for formal readmission. Students who do not provide due notice (60 days) of a change in the date of expected return or are not granted an extension of the return date must apply for formal readmission. Students may not transfer in any course work.

Voluntary. A student may be granted this status providing it does not begin after the date of roll call for any given semester. "W" for withdrawal will be recorded in lieu of grades for all registered courses.

Required. A student may be required by the dean of the college to take up to one semester's leave of absence if such action is judged to be in the student's academic interest.

9. Withdrawal

Voluntary. A student may withdraw voluntarily from the College at any time, with "W" grades being recorded for all enrolled courses if withdrawal is made before the first day of final examinations. If withdrawal is made during the final examination period, regular grades will be recorded. A student who withdraws must make formal application for readmission.

Required.

- (1) First—a required withdrawal for academic reasons. To qualify for readmission, the student must attend an accredited college elsewhere for one regular semester (not a summer session); have the program of study approved in advance by the office of academic affairs and the Committee on Academic Standards; and attain a minimum average of at least 2.25 with no grades lower than a C. Military service or satisfactory employment, normally for at least one year, may be substituted for this scholastic experience. A student who is required to withdraw must make formal application for readmission by stated deadlines on page 151.
- (2) Second—a student required to withdraw for a second time for academic reasons does not have the privilege of applying for readmission at any time.
- (3) Administrative—students who fail to register and do not inform the college of their plans or those that do not pay the pre-registration fee by the stated deadline, will be Administratively Withdrawn, but have the privilege of following the readmission guidelines on page 151.

Registration and Advising

Final registration occurs for all students in January for the spring term and in September for the fall term. However, there are pre-registration periods in November and April during which students must meet with their advisers and make academic plans for the next semester. The only exceptions to this are incoming freshmen and new transfer students who are advised during New Student Orientation. Each new student is assigned to a faculty adviser who is responsible for approving final registration and who advises until the student selects and is accepted by a department or interdisciplinary study area as a major.

Responsibility rests with the student for the election of such courses as will satisfy the requirements of the College for graduation.

A variety of circumstances, singly or in combination, may prevent an undergraduate from realizing fullest benefit from the educational opportunity provided. Injudicious selection of courses, of majors and minors; inappropriate personal aspirations; inadequate study techniques or invalid learning procedures; and problems of personal and social adjustments are unfavorable circumstances that have been identified in studies of less successful college students. The College believes that counsel by mature, interested faculty advisers can assist individual students to recognize and to overcome those undesirable circumstances that affect their academic success. In special instances, the adviser makes referrals to a qualified director of counseling who assists the student to overcome problems in personal and social adjustment.

Schedule Changes

Students may add courses in their schedule during the first 15 academic days of a semester if they have the approval of their adviser and the instructor(s) in question. Students may drop courses, without penalty, in their schedule during the first 15 academic days of a semester if they have the approval of their adviser. A student must petition the College Committee on Academic Standards for approval of a withdrawal from a course after the Add/Drop period, with a "W" grade being recorded if the petition is approved. In circumstances in which a student has not participated in a course to any substantial extent due to circumstances beyond the student's control the Standards Committee may be petitioned for approval of dropping of the course from the record after the three week add/drop period.

A special situation prevails for multilevel courses in languages, mathematics, and the sciences, where adjustments may be made in the level of an assignment within the first 30 calendar days of the semester. The conditions of these reassignments are set forth on page 13.

Course Credit

At Dickinson:

Credit for courses is based on the assumption that at least three and one-half hours of study accompany each period of recitation or lecture.

Off Campus:

Dickinson students normally receive credit for up to one full year of academic work completed abroad or at other accredited institutions, provided the courses parallel the curriculum of Dickinson College and the student

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has obtained prior approval of the program of study from the academic adviser and the director of off-campus studies.

At the completion of the off-campus experience, students are responsible for submitting an official transcript or, where that is impossible, a satisfactory certificate of accomplishment. The graduation requirement of 34 courses normally will be reduced by *nine* for an academic year of full time work if all course grades are at least "C" or its equivalent. Part time course work, semester and summer study, and unusual circumstances will be evaluated on a proportional basis using the above formula.

Final determination of credit and satisfaction of Dickinson distribution and language requirements will be determined by the registrar. However, a standardized language test may be required of students wishing to satisfy the language requirement through course work completed abroad. In addition, students are responsible for ascertaining from the appropriate department chairman the extent to which work completed off campus will satisfy the requirements of their major or minor field of concentration.

Off-campus study involving any of the following circumstances requires prior approval of the Subcommittee on Off-Campus Study:

1. participation in more than two semesters of study off campus;
2. participation in more than one off-campus program;
3. credit for summer study at other institutions for more than one summer, or summer study for more than two course credits (four if taken between the freshman and sophomore years);
4. off-campus study in the senior year if it requires a waiver of the residence requirement that states that "at least six of the last eight or the last four courses immediately preceding graduation must be taken on campus."

As a general policy, students are not allowed to spend *just* the spring semester studying off campus. Therefore students desirous of taking only one semester off campus should plan to be away from the College during the fall semester. Exceptions may be granted by the Subcommittee on Off-Campus Study.

The Grading System

Marking Periods: There is a roll call evaluation for all students in each semester. At this roll call all teaching faculty submit only grades of C- and below and I (incomplete) to the registrar, except that all grades are reported for first semester freshmen at the regular fall semester roll call.

Grades will be reported to the registrar at the end of each semester. Once a grade has been reported to the registrar's office it may not be changed unless the change has been approved by both the instructor and the dean of the college.

Notations Appearing On The Academic Record:

In 1976, the faculty voted to change from A, B, C, D, and F grading to a system incorporating pluses and minuses.

Beginning in the Fall of 1976, therefore, the grading for course work is as follows: A, A-, B+, B, B-, C+, C, C-, D+, D, D-, and F. Pa or Fa (Pass or Fail), CR* or NoCR (Credit or No Credit), S** (Satisfactory), I (Incomplete), Au (Audit), W (Withdrew) continue unchanged.

*Credit/No Credit class sections must be approved by the Committee on Academic Standards. All students in these sections must receive one of these two grades and thus the grade is not the student's option. The grade of No Credit appears on the student's transcript, beginning with the Fall 1975 Semester.

**"Satisfactory" is a temporary, non-credit grade given until the second semester of a one-year course is completed, or until Independent Study or Research is completed.

Computation of Averages:

In the computation of averages the following scale of quality credit points will apply:

Grade	Quality Points
A	4.00
A—	3.67
B+	3.33
B	3.00
B—	2.67
C+	2.33
C	2.00
C—	1.67
D+	1.33
D	1.00
D—	0.67
F	0.00

A student's cumulative average shall be computed on the basis of all academic work which received a regular letter grade at Dickinson College or at other consortium colleges. The average shall be computed by summing the quality points for each letter graded course and dividing by the number of such courses taken. All averages shall be carried to two decimal points.

A student who fails a course may retake the same course for credit with both courses counting in the student's cumulative average. A student who has credit for a course may retake the same course only on an audit basis.

Application of Averages: A regular student is required to meet the following minimum standards of academic quality during the academic program.

Freshman: An average for the year of 1.75.

Sophomore: An average for the year of 2.00 or a cumulative average of 2.00 at the end of the sophomore year.

Junior: A cumulative average of 2.00 at the end of the junior year.

Senior (to be graduated): An average of 2.00 in all graded courses.

A student who fails to meet the minimum class standard will be required to withdraw unless the Committee on Academic Standards takes action otherwise. Procedures to qualify for re-admission are found on page 151.

A non-matriculated student must meet the same minimum standards as are required of a matriculated student. The number of courses a non-matriculated student has taken will determine class equivalence; a student must meet the minimum standard for that class in each successive two-semester block of work, regardless of the number of courses involved. A student who fails to meet the minimum standard will be required to withdraw unless the Committee on Academic Standards takes action otherwise. Formal readmission to the College and/or permission to take courses may be granted only after approval has been granted by the Committee on Academic Standards.

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Grades In Year

Courses: To be admitted to the second semester of a year course (a hyphenated or an asterisk course) the student must have attained a passing grade in the work of the first semester. Students who do not pass 101 Language courses and 113 Music courses will receive failing grades.

Senior—Unsatisfactory Grade In

Course: A final semester senior who does not receive credit for a course only because of a failure in a final examination may apply for one reexamination in each such course, provided the failure is not due to dishonesty. After successful reexamina-

tion, a new course grade may be recorded which will be no higher than the minimum passing grade in the applicable grading system. If a re-examination is allowed, it shall be conducted by a committee appointed by the chairman of the department in which the failure occurred and shall be conducted within ten (10) days of the date of the original examination except when an extension is granted by the Committee on Academic Standards.

Cancellation of Grade and Credit:

Any student who takes courses at Dickinson while in high school or in the summer after high school graduation and who then matriculates at Dickinson is allowed to cancel the grade and the credit received in, at most, two courses taken at Dickinson during that period. This in no way prevents a student from registering again for any course so canceled. Students should make the request for cancellation in writing to the registrar no later than Roll Call of the second semester of matriculated status.

Auditing

A student may audit a course without credit by obtaining the permission of the instructor and the student's adviser and then registering for it during the Drop/Add Period. Fee for auditing courses is one-half the course fee for part-time and non-matriculated students.

Courses taken as audits shall not appear on a student's transcript unless the instructor in question authorizes such an entry at the end of the semester. The instructor shall stipulate expectations of all such auditors early in the semester.

Pass/Fail Course Option

All students, except first semester freshmen, have the option of taking one course each semester on a pass/fail basis. The purpose of the pass/fail option is to stimulate the students' investigation of unfamiliar subjects in which they may be interested but lack confidence because of unfamiliarity with the approach to the subject matter. A student may not take more than a total of seven such courses out of the 34 required for graduation.

"Pass" is defined as work of a quality earning a grade of at least C and "fail" is defined as work of a quality earning a grade of C- or below. Courses taken under the pass/fail option are not counted in the student's cumulative grade point average. The student must satisfy the same requirements for the course expected of a regularly enrolled student.

A student may enroll in a course on a pass/fail basis with approval from the advisor at the time of registration and may change the grading status during the add/drop period. Instructors or departments may identify certain courses that cannot be taken with the pass/fail option or may deny the pass/fail registration to declared majors or minors in any course required by that department. A list of courses that cannot be taken pass/fail is available at registration. No course is offered which must be taken pass/fail.

Incomplete Grades

A grade of Incomplete may be reported only in cases in which illness or other serious emergency has prevented the student from completing the work for the marking period. No

incomplete shall be in effect until a form has been filed with the registrar which briefly states the reasons under which it has been granted, contains an evaluation of the student's work to the date of the Incomplete, and is signed by both student and instructor. An Incomplete may not be reported because of negligence or procrastination on the part of the student. A grade of Incomplete may be reported only if the student has done satisfactory work in the completed portion of the course. An incomplete grade at the end of a semester shall be cleared before the Roll Call of the following semester unless exception is granted by the Committee on Academic Standards. In every case, the Incomplete must be cleared before the end of the second semester following. If an Incomplete has not been cleared within

stipulated time limits, the appropriate 'grade' indicating a lack of satisfactory completion will be recorded.

Honors Upon Graduation

A student who in the total program at Dickinson College attains an average of at least 3.75 shall be awarded the degree *summa cum laude*.

A student who in the total program attains an average of at least 3.50 but less than 3.75 shall be awarded the degree *magna cum laude*.

A student who in the total program attains an average of at least 3.25 but less than 3.50 shall be awarded the degree *cum laude*.

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Lectureships, Endowed Programs and Awards

THE JAMES HENRY MORGAN LECTURESHIP. This lectureship is endowed by funds set aside by the board of trustees in 1929 in grateful appreciation for the distinguished service of James Henry Morgan of the Class of 1878: professor of Greek, 1884-1914; dean, 1903-14; and president of the College, 1914-28. On two subsequent occasions, 1931-32 and 1933-34, Dr. Morgan again served as interim president. The board's action calls for the income from the James Henry Morgan Lectureship Fund to be used by the president of the College "for the procurement of one or more special lectures annually upon such subject or subjects as he may deem wise, . . ." More recently the lectureship has been filled on an annual basis by a scholar-in-residence for a period of three to five days, meeting informally with individuals and class groups and lecturing on a topic with emphasis on the disciplines of social sciences and humanities. The recipient is selected by a committee appointed by the president of the College with representatives from these disciplines.

The most recent Morgan Lecturer was philosopher Paul Ricoeur. Over a period of weeks prior to his four-day campus visit, a series of all-College seminars on Ricoeur's thought were held. Because of this advanced preparation, the several meetings with Ricoeur in small and large groups as well as by individuals were unusually exciting for the Dickinson community.

THE BOYD LEE SPAHR LECTURES IN AMERICANA. This lectureship was established in 1947 in recognition of the importance of Dickinson College and its graduates in the large history of American culture, and was named in honor of Boyd Lee Spahr, A.M., LL.D., D.C.L., of the Class of 1900, in grateful appreciation of his continuous interest in the Dickinson College Library and of his numerous contributions to historical collections.

THE GLOVER MEMORIAL LECTURES. This lectureship in science was established in 1958 in memory of John Glover of New Castle on Tyne, England, the inventor of the Glover Tower, and in memory of his son and grandson, Henry and Lester Glover, by the late Dr. John D. Yeagley and by Mrs. Yeagley of York, Pennsylvania.

THE STELLA LaZELLE BARNHART MEMORIAL FUND FOR THE CHAPLAINCY. Established in 1974 by a special endowment gift from the estate of the late Stella LaZelle Barnhart of Chicago, Illinois. The income provided by this endowment is used to sustain permanently the extra-curricular programs of campus ministry administered by the office of the chaplain at Dickinson College.

THE DICKINSON COLLEGE ARTS AWARD. Initiated by the faculty of the College and endowed in 1959 by gifts from members of the board of trustees in honor of William W. Edel, president of the College from 1946 to 1959. The award takes the form of a Wedgwood medallion after a sculpture created by Nancy Dryfoos, distinguished American sculptress, and bearing the likeness of former President Edel. The medallion was cast especially for Dickinson College by the Wedgwood Potteries of Barlaston, England. In addition to the Wedg-

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wood medallion, the recipient of the award receives an honorarium. The Arts Award is given to an individual who has made an outstanding contribution in the creative or performing arts. Beginning with the 1974-75 academic year, the recipient is expected to be in residence for a three to four-day period of interaction with the College community. Since its establishment, Arts Award recipients have been: Robert Frost, 1958-59, Poetry; Eero Saarinen, 1959-60, Architecture; Judith Anderson, 1960-61, Theatre; Leonard Baskin, 1963-64, Graphic Arts; Walter Piston, 1965-66, Music; W. H. Auden, 1967-68, Poetry; John Cage, 1969-70, Music; The Philadelphia Orchestra, 1972-73, Music; Mauricio Lasansky, 1974-75, Printmaker; Zelda Fichandler, 1976-77, Drama.

THE PRIESTLEY AWARD. Given each spring during the Joseph Priestley Celebration when the College's collection of Priestley apparatus and memorabilia are put on special display. The award is presented in memory of Joseph Priestley, discoverer of oxygen, to a distinguished scientist for discoveries or for contributions to the welfare of mankind. A draft for one thousand dollars and a Priestley Medallion, a ceramic struck from the original moulds made in 1775 by the first Josiah Wedgwood after a pen and ink sketch of Priestley by John Flaxman, constitute the award. The recipient of the award is selected by the president of the College from a slate of nominees submitted by a commission consisting of former Priestley Award recipients and others associated with the award since its establishment in 1952. Recipients of the Priestley Award have been:

- 1952 Sir Hugh Stott Taylor, dean of the graduate school, Princeton University.
- 1953 Paul R. Burkholder, of the Class of 1924, Osborne Professor of Botany at Yale University, discoverer of chloromycetin.
- 1954 Karl T. Compton, chairman of the corporation, Massachusetts Institute of Technology.
- 1955 Harold C. Urey, University of Chicago. Nobel Prize Laureate in Chemistry 1934.
- 1956 Detlev W. Bronk, president, Rockefeller Institute for Medical Research.
- 1957 Edward Teller, General Advisory Committee, Atomic Energy Commission.
- 1958 George Bogdan Kistiakowski, Abbott and James Lawrence Professor of Chemistry, Harvard University.
- 1959 Willard Frank Libby, Member, Atomic Energy Commission. Nobel Prize Laureate in Chemistry 1960.
- 1960 Glenn T. Seaborg, chancellor and professor of chemistry, University of California. Nobel Prize Laureate in Chemistry 1951.
- 1961 Maurice Ewing, Director, Lamont-Doherty Geological Observatory of Columbia University.
- 1962 Robert W. Woodward, Donner Professor of Science, Harvard University. Nobel Prize Laureate in Chemistry 1965.
- 1963 Kenneth S. Pitzer, president, Rice University.
- 1964 Isador I. Rabi, Higgins Professor of Physics, Columbia University. Nobel Prize Laureate in Physics 1944.

- 1965 Joel H. Hildebrand, professor of chemistry emeritus, University of California, Berkeley.
- 1966 Charles H. Townes, provost, Massachusetts Institute of Technology. Nobel Prize Laureate in Physics 1964.
- 1967 George W. Beadle, president, University of Chicago. Nobel Prize Laureate in Medicine 1958.
- 1968 Marshall W. Nirenberg, chief of the Laboratory of Biochemical Genetics, National Heart Institute.
- 1969 Linus C. Pauling, research associate, California Institute of Technology. Nobel Prize in Chemistry 1954. Nobel Peace Prize 1962.
- 1970 George Wald, Higgins Professor of Biology, Harvard University, Co-Recipient, Nobel Prize for Medicine 1967.
- 1971 Margaret Mead, curator emeritus of ethnology, American Museum of Natural History.
- 1972 George C. Pimentel, professor of chemistry, University of California, Berkeley.
- 1973 Philip H. Abelson, president of the Carnegie Institute of Washington and editor of *Science*, co-discoverer of neptunium.
- 1974 Henry Eyring, dean emeritus of the graduate school, department of chemistry, University of Utah, Salt Lake City.
- 1975 Carl Sagan, professor of astronomy and space sciences, Cornell University.
- 1976 John G. Kemeny, president of Dartmouth College.
- 1977 W. Frank Blair, professor of zoology, University of Texas, Austin.
- 1978 J. Tuzo Wilson, director general, Ontario Science Center.
- 1979 Melvin Calvin, university professor of chemistry, University of California at Berkeley.

THE GANOE AWARD. The Constance and Rose Ganoë Memorial Fund established in 1969 in accordance with the testamentary wishes of the late William A. Ganoë of the Class of 1902 provides that an award be given annually to that professor of Dickinson College who, by secret ballot of the members of the senior class immediately prior to their graduation, shall have been voted the most inspirational teacher during their entire college course. The award consists of a cash honorarium of one thousand dollars plus funds to be used at the discretion of the professor for the enrichment of his teaching at Dickinson.

Previous Ganoë Award recipients are so identified in the faculty section of the Directory.

THE LINDBACK AWARD. Instituted by the trustees of the Christian R. and Mary F. Lindback Foundation, the Lindback Distinguished Teaching Award is the highest honor the College bestows on members of its faculty. Selected by the president, the Lindback Award recipient receives an honorarium of not less than five hundred dollars and not more than one thousand dollars. The Lindback Foundation further awards one thousand dollars in scholarships to deserving students who can meet certain basic standards.

Previous Lindback Award recipients are identified as such in the faculty section of the Directory.

Endowed and Named Chairs

The College has a number of endowed and named chairs. The holders of these chairs are elected by the board of trustees and the chairs which they hold are indicated in the faculty list. The endowed chairs are as follows:

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THE LEMUEL T. APPOLD FOUNDATION, endowing the chair of the president of the College, was established by the board of trustees from a part of the bequest of Lemuel T. Appold of Baltimore, Maryland, of the Class of 1882 and a generous benefactor of the College.

THE ROBERT COLEMAN CHAIR OF HISTORY. The bequest of Robert Coleman, Esq., of Lancaster, Pennsylvania, was designated by the board of trustees in 1827 for the endowment of a professorship, making this one of the oldest American professorships.

THE THOMAS BEAVER CHAIR OF ENGLISH LITERATURE was endowed by Thomas Beaver, Esq., of Danville, Pennsylvania, in 1889.

THE ASBURY J. CLARKE CHAIR OF LATIN was established in 1918 by the gift of the widow of Asbury J. Clarke, of the Class of 1863.

THE SUSAN POWERS HOFFMAN CHAIR OF MATHEMATICS was endowed in 1923 and named in memory of Susan Powers Hoffman, of Carlisle.

THE RICHARD V. C. WATKINS CHAIR OF PSYCHOLOGY was endowed in 1928 by the bequest of Richard V. C. Watkins, of the Class of 1912.

THE MARTHA PORTER SELLERS CHAIR OF RHETORIC AND THE ENGLISH LANGUAGE is an endowed professorship established by 1936 by a gift of her son, the late Professor Montgomery Porter Sellers, of the Class of 1893.

THE BOYD LEE SPAHR CHAIR OF AMERICAN HISTORY was endowed in 1948 by the gift of Boyd Lee Spahr, of the Class of 1900.

THE GEORGE HENRY KETTERER AND BERTHA CURRY KETTERER CHAIR OF RELIGION was endowed in 1949 by the gifts of George Henry Ketterer, of the Class of 1908, and his wife, Bertha Curry Ketterer.

THE ROBERT BLAINE WEAVER CHAIR OF POLITICAL SCIENCE was endowed by the bequest of Laura Davidson Weaver, and named for her brother, Robert Blaine Weaver, of the Class of 1874.

THE C. SCOTT ALTHOUSE CHAIR OF CHEMISTRY was established in 1950 and named for C. Scott Althouse, a trustee of the College.

THE ALFRED VICTOR DUPONT CHAIR OF CHEMISTRY, named for Alfred Victor duPont, a student at the College, 1814-16 was established in 1950 by the gift of his grandson, the late Irene duPont, of Wilmington, Delaware.

THE THOMAS BOWMAN CHAIR OF RELIGION was endowed in 1949 by the gift of the Kresge Foundation (Sebastian S. Kresge, L.H.D., Founder), and named for Thomas Bowman of the Class of 1837, the first graduate of Dickinson College to be elected a Bishop of the Methodist Episcopal Church.

THE JOSEPH PRIESTLEY CHAIR OF NATURAL PHILOSOPHY was established in 1959 by gifts of William H. Baker and S. Walter Stauffer in memory of Salome Baker Stauffer.

THE WILLIAM W. EDEL CHAIR IN THE HUMANITIES was endowed in 1959 by the gift of Merle W. Allen, a College trustee, and his wife, Elizabeth Frederick Allen, "in recognition and commemoration of Dr. Edel's outstanding leadership as president of the College from 1946-1959."

THE JAMES HOPE CALDWELL MEMORIAL CHAIR was endowed in 1966 by the bequest of Mr. and Mrs. James Hope Caldwell.

THE HENRY LOGAN CHAIR OF ECONOMICS was established in 1967 by the gift of Henry Logan of the Class of 1910.

THE RUSSELL I. THOMPSON CHAIR OF THE DEAN OF THE COLLEGE was established in 1967 by the gift of Ethel Wright Thompson.

THE GEORGE W. PEDLOW, CLASS OF 1901, CHAIR OF EDUCATION established in 1972 in memory of his father by C. Wesley Pedlow, Jr., of the Class of 1934.

THE GLENN E. AND MARY L. TODD CHAIR established in 1973 by bequests of Glenn E. Todd, Class of 1912, and Mary Line Todd, Class of 1923.

THE CHARLES A. DANA PROFESSORSHIP PROGRAM established in 1968 by a matching grant of \$250,000 from the Charles A. Dana Foundation. The income from this fund is to be used annually to subsidize the salaries of four Dana Professors in varying amounts but in excess of the average salary for full professors at the time of appointment.

THE GEORGE METZGER ENDOWMENT FUND, held in trust by the Trustees of the Fund, the income therefrom paid annually to Dickinson College at the discretion of the Trustees of the George Metzger Endowment Fund to endow the chair of the dean of women at Dickinson College.

The George Metzger Endowment Fund was established in 1963 by the Metzger College Trustees in memory of George Metzger of the Class of 1798 of Dickinson College who made a testamentary provision for the establishment of a college for the education of young women after his death. By action of the board of trustees of Metzger College in 1913, use of the Metzger College building, Metzger Hall, was granted to Dickinson College as a residence hall for women students. Fifty years later, Dickinson relinquished its use of Metzger Hall, the property was sold, and the proceeds used to establish the George Metzger Endowment Fund.

Honor Scholarships and Prizes

FOR GENERAL EXCELLENCE

THE CLASS OF 1902 AWARD. Awarded to that member of the junior class who, by vote of the student's classmates, has contributed most to the College.

THE HUFSTADER SENIOR PRIZES. Endowed by Dr. William F. Hufstader. Awarded to the senior man and woman who, in the judgment of the president of the College, have contributed most to the good of the College.

FOR SCHOLASTIC EXCELLENCE

The College Committee on Academic Standards has the responsibility of recommending recipients of these awards to the faculty. The committee has established as a guideline for eligibility for the various class awards the following: completion of six, twelve, eighteen, or twenty-four Dickinson courses with a final letter grade in order to be eligible for freshman, sophomore, junior, or senior awards, respectively.

THE WILLIAM K. DARE HONOR SCHOLARSHIP. Endowed by Lemuel T. Appold, Esq. '82. Awarded to that male student of the freshman, sophomore or junior class who has attained the highest scholastic average in the work of the previous year.

THE JAMES FOWLER RUSLING PRIZE. Awarded to a graduating senior who excels in scholarship.

THE DELAPLAINE McDANIEL PRIZES. Awarded to two members of the freshman class and to one member of the sophomore class for excellence in scholarship.

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THE JOSEPH MIDDLETON AND ISABEL MULLIN BURNS MEMORIAL PRIZE. Endowed by Helen Burns Norcross '12, former dean of women. Awarded to the woman student attaining the highest scholastic average during the sophomore year.

THE JOHN PATTON MEMORIAL PRIZES. Endowed by the Honorable A. E. Patton as a memorial to his father. Awarded for high scholastic standing to a member of each college class.

SOPHISTERS. By action of the board of trustees, and in keeping with an old Dickinson tradition, the highest ranking junior is named Senior Sophister for his or her final year in College, while the highest-ranking sophomore is named Junior Sophister for the following year. The distinction of Senior and Junior Sophister carries with it a \$500 prize.

FOR EXCELLENCE IN SPECIAL FIELDS

THE WILLIAM LENNOX AVIS PRIZE IN U.S. HISTORY. Endowed by Minnie Woods Avis.

THE BAIRD BIOLOGY PRIZES. In honor of Spencer Fullerton Baird, Dickinson's most outstanding alumnus in the field of biology. Awarded to two senior biology majors who excel in biology and show promise for future achievement in the field of biology (broadly defined).

THE HENRY P. CANNON MEMORIAL PRIZE. Endowed by the trustees. Awarded to a member of the sophomore class who excels in mathematics.

THE CHI OMEGA PRIZE. The gift of the Dickinson Chapter. Awarded to a junior or senior woman who excels in economics, political science, sociology, or psychology.

THE CAROLINE HATTON CLARK MATHEMATICS SCHOLARSHIPS.

THE CLASS OF 1875 PRIZE. Endowed

in memory of John H. Ahl, Class of 1875, by his son, John C. Ahl. Awarded to the senior who compiles the highest average in economics.

THE CLASS OF 1914 PRIZE. Endowed in memory of John C. Ahl. Awarded to that member of the senior class who excels in American history.

THE FORREST E. CRAVER MEMORIAL MATHEMATICS PRIZE. Awarded to a member of the junior class.

THE MERVIN GRANT FILLER MEMORIAL PRIZE. Endowed by Tolbert J. Scholl. Awarded for excellence in the classical languages.

THE C. W. FINK MEMORIAL ECONOMICS PRIZE.

THE GANOE PRIZE IN INTERNATIONAL STUDIES. Awarded to the senior achieving highest honors in international studies.

THE GOULD MEMORIAL DRAMA PRIZES. Provided by Dr. Herbert M. Gould in memory of his father and mother.

THE CHARLES MORTIMER GRIFFIN PRIZE. Awarded to a member of the senior class for excellence in religion.

THE WILBUR HARRINGTON AND HELEN BURNS NORCROSS PRIZE. Awarded for excellence in psychology during the junior year.

JEANNETTE HOLZSHU MEMORIAL PRIZE IN AMERICAN LITERATURE.

THE CAROLINE KENNEDY FRENCH LITERATURE PRIZE. Endowed by friends. Awarded annually to a student who reads French easily and who takes delight in French literature.

THE WILLIAM W. LANDIS MEMORIAL PRIZE IN MATHEMATICS. Endowed by George G. Landis '20. Awarded to a member of the freshman class.

THE LANDIS-MOHLER PRIZE IN PHYSICS. Endowed by George G. Landis '20 in memory of Professor John Frederick Mohler, professor of physics, 1896-1930. Awarded to a member of the freshman class.

THE RUTH SELLERS MAXWELL SCHOLARSHIPS IN ENGLISH LITERATURE. Endowed by Robert H. Maxwell '15 in memory of his wife.

THE ALICE AND F. CHAPLINE MOOREHEAD—BARBARA ELDER TIMBERLAKE AWARD. Endowed as a memorial by Caroline Moorehead Elder. Awarded to that student who submits the best piece of verse.

THE JOSEPH J. MYERS PRIZE. To be awarded annually to a varsity basketball player achieving academic excellence. Endowed in honor of Joseph J. Myers, Class of 1932, by his wife, Marie Moore Myers, and his brother, Charles E. Myers.

THE WELLINGTON A. PARLIN SCIENCE SCHOLARSHIP AWARD. Awarded to that junior majoring in biology, chemistry or physics, who has, during three years at Dickinson, attained the highest scholastic average.

THE GAYLARD H. PATTERSON MEMORIAL PRIZE. Awarded to that student in sociology who presents the best sociological analysis of a public policy.

THE PENNSYLVANIA INSTITUTE OF CERTIFIED PUBLIC ACCOUNTANTS AWARD. Awarded to the outstanding accounting student.

THE MORRIS W. PRINCE HISTORY PRIZE. Endowed by the Class of 1899.

THE MARGARET McALPIN RAMOS AWARD. Awarded to a junior or senior Spanish major.

THE CARL A. RHOADES MEMORIAL PRIZE. Awarded annually to one or more students demonstrating outstanding responsibility as members of the College food service.

THE CHRISTOPHER LEE ROBERTS SCHOLARSHIP. For students in Latin or Greek, to be used toward study abroad in those fields.

THE WINFIELD DAVIDSON WALKLEY PRIZES. Endowed by D. R. Walkley, D.C.L., in memory of his son. Awarded to two members of the freshman class who excel in declamation, either forensic or dramatic.

THE ANGELINE BLAKE WOMER MEMORIAL PRIZE. Awarded each year to that member of the freshman class who attains the highest grade in rhetoric and composition.

THE AGNES STERRETT WOODS PRIZE. Awarded to a woman student for the best short story or essay.

JOHN DAVID WRIGHT, III MEMORIAL SCHOLARSHIP IN CLASSICAL LANGUAGES. To be awarded to a freshman studying Latin or Greek.

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Scholarships

An abbreviated listing of endowed and unendowed scholarships follows. Complete descriptions of each, including restrictions, etc., are contained in the official records of the College and administered accordingly.

The College offers substantial additional scholarship aid beyond the named scholarships listed here.

UNENDOWED

THE CHARLES A. DANA SCHOLARSHIP PROGRAM. Established by The Charles A. Dana Foundation. Approximately fifteen renewable scholarships awarded annually to members of the sophomore class. Awards vary from an honorarium of \$100 to full tuition according to need. Dana Scholarships are among Dickinson's highest honors and are awarded on the basis of superior academic achievement and demonstrated leadership in the College community.

THE MARY DICKINSON CLUB SCHOLARSHIPS of \$500 per year were established in 1960 to be awarded to outstanding freshmen who have financial need. Renewable for subsequent years providing financial need continues, exemplary campus citizenship is maintained, and above-average grades are earned.

THE JAMES S. KEMPER FOUNDATION SCHOLARSHIPS. Established by annual grants from the James S. Kemper Foundation. Awards are made to worthy undergraduate students interested in pursuing a career in insurance.

THE LINDBACK SCHOLARSHIP PRIZE. Provided by the trustees of the Christian R. and Mary F. Lindback Foundation to help deserving students who are residents of New Jersey, Pennsylvania, Delaware, and Maryland, without regard to race or religious affiliation, who by reason of their scholastic attainment, character, personality, and all around ability, give great promise of benefiting therefrom and of being useful and valuable citizens of their communities. The selection is not made on the basis of scholarship alone.

THE MYRL S. MYERS MEMORIAL SCHOLARSHIP. Provided by Alice Brown Myers in memory of her husband.

THE N.J. CONFERENCE OF THE UNITED METHODIST CHURCH SCHOLARSHIP. Provided by the Commission on Higher Education of the New Jersey Conference. Given to a student who has been a member of a United Methodist Church within the bounds of the Conference.

UNITED METHODIST SCHOLARSHIPS. Provided by the Board of Education of the United Methodist Church. Given to a student on recommendation from the pastor of the student's home church who has interest and experience in United Methodist activities, and attained high scholarship.

THE U.S. ARMY R.O.T.C. SCHOLARSHIPS. Awarded to outstanding sophomore military science students who desire a career as officers in the United States Army.

ENDOWED

THE LEO ASBELL MEMORIAL SCHOLARSHIP. Endowed by the Asbell family. Preference given to a resident of southern New Jersey.

THE BALDWIN MEMORIAL CHURCH SCHOLARSHIP.

THE M. GRACE BECHTEL MEMORIAL SCHOLARSHIP. Awarded to a student preparing for the ministry of the Central Pennsylvania Conference of The United Methodist Church.

THE WILLARD E. AND HELEN T. BITTLE SCHOLARSHIP. Endowed by a bequest from the Estate of Willard E. Bittle of the Class of 1927. Preference is given to students majoring in economics.

THE BODINE SCHOLARSHIP. Endowed by George I. Bodine, Jr., Esq.

THE GEORGE L. BROWN SCHOLARSHIP. Preference given first to male students from Middle Paxton Township, Dauphin County, Pa.; secondly, to male students from Susquehanna Township, Dauphin County, Pa.; and lastly, to other worthy and eligible male students. The College makes available funds equal to the amount of this scholarship for female students eligible for financial aid.

THE CARLISLE CORPORATION SCHOLARSHIPS. Preference given to children of employees of Carlisle Corporation, then to residents of Carlisle or adjacent territory; and lastly to other eligible students.

CENTRAL PENNSYLVANIA UNITED METHODIST CONFERENCE SCHOLARSHIPS. To members of churches of the Central Pennsylvania Conference.

THE CLASS OF 1909 SCHOLARSHIP. Preference given to a descendant of the Class of 1909.

THE CLASS OF 1914 SCHOLARSHIP.

THE CLASS OF 1915 SCHOLARSHIP. Preference given to a descendant of the Class of 1915.

THE CLASS OF 1917 SCHOLARSHIP. Preference given to a descendant of the Class of 1917.

THE CLASS OF 1918 SCHOLARSHIP. Preference given to a descendant of the Class of 1918.

THE CLASS OF 1921 SCHOLARSHIP. Preference given to a descendant of the Class of 1921.

THE CLASS OF 1928 SCHOLARSHIP. Preference given to a descendant of the Class of 1928.

THE CLASS OF 1930 SCHOLARSHIP. Preference given to a descendant of the Class of 1930.

THE CLASS OF 1935 RED MALCOLM SCHOLARSHIP. Preference given to a descendant of the Class of 1935.

THE CLASS OF 1938 SCHOLARSHIP.

THE CLASS OF 1960 DR. GILBERT MALCOLM SCHOLARSHIP.

THE JOEL CLASTER MEMORIAL SCHOLARSHIP.

THE JOSEPH AND MARY STRONG CLEMENS SCHOLARSHIP. Endowed by Joseph Clemens. Awarded to students studying for the ministry of The United Methodist Church.

THE CARRIE A.W. COBB SCHOLARSHIP. Endowed in memory of the Reverend Charles H. Rorer, D.D. Awarded to students preparing for the ministry.

THE JOHN O. COCKEY, JR. MEMORIAL SCHOLARSHIP. Endowed by John O. Cockey and Mrs. R.M. Sheridan.

THE MONCURE DANIEL CONWAY SCHOLARSHIP. Established by gift of Eleanor Conway Sawyer, granddaughter of Moncure Conway.

THE ELEANOR COOPER SCHOLARSHIP.

THE CORSON SCHOLARSHIPS. Endowed in honor of Bishop Fred P. Corson and Frances B. Corson by the Wyoming Conference of The United Methodist Church. Awarded to United Methodist students from the Wyoming Conference.

THE NATHAN DODSON CORTRIGHT MEMORIAL SCHOLARSHIP. Endowed by Mrs. Emma Cortright Keen. Awarded to a student preparing for the ministry.

THE MR. AND MRS. ROBERT B. DAVIES SCHOLARSHIP. Awarded to United Methodist students from Schuylkill County, Pennsylvania.

THE S. ADELBERT DELUDE SCHOLARSHIP. Preference given to a student from New York.

THE DICKINSON COLLEGE FRATERNITY SCHOLARSHIPS. Endowed by the alumni of the local chapters of the ten national fraternities represented on campus. The annual income from each of these separate fraternity funds is awarded with preference given to active members of the respective fraternities. The College makes available funds equal to the amount of this scholarship for female students eligible for financial aid.

THE LUCY HOLT DONEY MEMORIAL SCHOLARSHIP. Endowed by Jean, Hugh and John Doney.

THE SMITH ELY SCHOLARSHIP. Preference given to students from New York City and vicinity.

THE WILLIAM SCHUYLER EVES MEMORIAL SCHOLARSHIP. Preference given to male students preparing for the ministry. The College makes available funds equal to the amount of this scholarship for female students eligible for financial aid.

THE FARMER'S TRUST COMPANY SCHOLARSHIP. Preference given to the son or daughter of an employee

REFERENCE

of the Farmer's Trust Company, Carlisle, Pa.

THE ROBERT M. FERGUSON, JR. MEMORIAL SCHOLARSHIP. Endowed by Grace C. Vale.

THE FIRST PRESBYTERIAN CHURCH, YORK, PENNSYLVANIA, SCHOLARSHIPS. Endowed by Henry Logan '10 to assist in educating qualified students from the Church or Presbytery.

THE E. HAROLD AND FLORENCE F. FRANTZ SCHOLARSHIP. Established by Mr. and Mrs. Frantz. Awarded to a freshman man or woman. Selection is based on evidence of sound character and intellectual promise and also on potential for service to Dickinson and the wider community.

THE FREEMAN SCHOLARSHIP. Endowed by Frank A. Freeman, Esq.

THE MELVILLE GAMBRILL MEMORIAL SCHOLARSHIP. To provide for young men preparing for the ministry. The College makes available funds equal to the amount of this scholarship for female students eligible for financial aid.

THE DR. AND MRS. FORNEY P. GEORGE SCHOLARSHIPS. For students demonstrating a commitment to human values and the delivery of medical services on a humanistic basis who are preparing to enter the medical professions, including dentistry.

THE JOHN GILLESPIE MEMORIAL SCHOLARSHIP. Endowed by Miss Kate S. Gillespie as a memorial to her father.

THE M. BRANDT GOODYEAR SCHOLARSHIP.

THE EDNA GRACE GOODYEAR MEMORIAL SCHOLARSHIP. Endowed by Samuel M. Goodyear, a former Trustee of the College. Preference given to students from Carlisle, Pa.; secondly, to students from Cumberland County, Pa.; and lastly, other eligible students.

THE JOHN H. HACKENBERG SCHOLARSHIP. Awarded to a student pre-

paring for the United Methodist ministry.

THE HERBERT G. AND NELLE P. HAMME SCHOLARSHIP. Preference given to foreign students studying at Dickinson College.

THE HAVERSTICK AND SNAVELY SCHOLARSHIP.

THE J. FRED HEISSE SCHOLARSHIP. Endowed by his brother, E. W. Heisse.

THE HONORABLE E. FOSTER HELLER SCHOLARSHIP. Endowed by Anna C. Halsey. Awarded to male students requiring funds to continue their Dickinson education. The College makes available funds equal to the amount of this scholarship for female students eligible for financial aid.

THE HORN SCHOLARSHIP. Endowed by J. Edward Horn.

THE BRUCE HUGHES SCHOLARSHIP.

THE WILLIAM ALBERT HUTCHINSON MEMORIAL SCHOLARSHIP. Endowed by the Conway Hall Alumni Association. Preference given to descendants of former students of Conway Hall.

THE BENJAMIN D. JAMES SCHOLARSHIPS. Established by Mr. and Mrs. Robert J. Wise in honor of Dr. James who is Richard V.C. Watkins Professor Emeritus of Psychology and Education. During his 36 years as a member of the faculty, Dr. James also held appointments as dean of admissions and dean of students at Dickinson.

THE CHARLES H. B. KENNEDY MEMORIAL SCHOLARSHIP. Endowed by members of the "D" Club.

THE LEONA B. KLINE AND SIDNEY D. KLINE SCHOLARSHIP. Awarded with preference to entering students who have formally declared their intent to pursue a profession of ordained ministry in a Protestant religious denomination. Grants are renewable for the sophomore, junior and senior years providing the recipient continues preparation for the ministry.

THE DAVID R. SIEBER — IRVING E. KLINE — MABLE SIEBER KLINE SCHOLARSHIP.

LAFAYETTE AVENUE PRESBYTERIAN CHURCH, BROOKLYN, NEW YORK, SCHOLARSHIP. Endowed by Henry Logan '10 to assist in educating a qualified student from the Church or Presbytery.

THE MERKEL LANDIS SCHOLARSHIP. Preference given to students from Carlisle, Pa.; secondly, to students from Cumberland County, Pa.; and lastly, other eligible students.

THE ALBANUS CHARLES LOGAN MEMORIAL SCHOLARSHIP. Endowed by Maria Dickinson Logan. Preference given to a male graduate of Germantown High School. The College makes available funds equal to the amount of this scholarship for female students eligible for financial aid.

THE HENRY LOGAN SCHOLARSHIPS. THE GEORGE LANE LOW SCHOLARSHIP. Endowed by Miss Elizabeth A. Low '91, in memory of her brother, to aid deserving students, with preference to be given to students residing in Columbia County, Pennsylvania.

THE JOHN B. LUCAS SCHOLARSHIP. To assist a freshman student from Wilmington, Delaware. Preference given to the son or daughter of an employee of the Penn-Central Company or a former employee of the Atlas Powder Company, now a division of I.C.I. Americas, Inc.

THE RICHARD H. McANDREWS SCHOLARSHIP. Endowed by the wearers of the "D" in memory of Associate Professor Emeritus R.H. McAndrews of the Department of Physical Education.

THE CHARLES WATSON McKEEHAN SCHOLARSHIP. Endowed by Mary A. McKeegan and Charles L. McKeegan in memory of their husband and father, a Trustee of the College, 1879-95.

THE BESSIE McCULLOUGH MEMORIAL SCHOLARSHIP. Endowed by her husband.

THE ANTHONY MACH MEMORIAL SCHOLARSHIP. Preference given to a student entering the final year of studies in Economics.

C.H. MASLAND & SONS SCHOLARSHIPS. Preference given to sons and daughters of employees of C.H. Masland & Sons, Carlisle, Pa. and then to residents of Carlisle or adjacent territory, and lastly to other eligible students.

THE MAY MEMORIAL ASSOCIATION SCHOLARSHIP. Endowed in memory of Joseph M. and Aimee L. May. Preference given to students from the Greater New York area.

THE BISHOP WILLIAM VERNON MIDDLETON SCHOLARSHIP. Endowed by the Claude Worthington Benedum Foundation. Preference given to students from West Virginia and Western Pennsylvania.

THE ARTHUR MILBY SCHOLARSHIP. Endowed by Miss Mary R. Burton. Preference given to young men preparing for the ministry. The College makes available funds equal to the amount of this scholarship for female students eligible for financial aid.

THE THEODORE F. MILLER SCHOLARSHIP.

THE WILLIAM VAN AXEN MILLER MEMORIAL SCHOLARSHIP FUND. Established in 1968 by his parents, Mr. and Mrs. Edward A. Miller.

THE ROY W. MOHLER SCHOLARSHIP. Endowed by his former students at Jefferson Medical School and others. Given in the second semester of the senior year to that student with the *greatest* need who has been accepted for admission to medical school the following year.

THE MONAGHAN PRESBYTERIAN CHURCH, DILLSBURG, PENNSYLVANIA, SCHOLARSHIPS. Endowed by Henry Logan '10 to assist in educating qualified students from the Church or Presbytery.

THE THOMAS MONTGOMERY SCHOLARSHIP. Endowed by Colonel

REFERENCE

Robert H. Montgomery, L. L. D., in memory of his father.

THE MARLIN E. OLMSTED SCHOLARSHIPS. Endowed by Mrs. Vance C. McCormick in memory of her husband, an honorary alumnus of the College.

THE CHARLES E. PETTINOS SCHOLARSHIP. Endowed by the Charles E. and Joy C. Pettinos Foundation in memory of Mr. Pettinos, a former College trustee.

THE READER'S DIGEST FOUNDATION SCHOLARSHIP.

THE ERNEST C. AND MIMA J. REISINGER SCHOLARSHIP. Endowed by Reisinger Brothers, Inc., Carlisle, Pa. Preference given to sons and daughters of employees of Reisinger Brothers, Inc.

THE ROBERT F. RICH MEMORIAL SCHOLARSHIPS. Endowed by Robert F. and Patti Rich and the Woolrich Woolen Mills with preference given to children of Woolrich Woolen Mills employees.

THE HORACE ELTON ROGERS SCHOLARSHIP. Endowed by his friends in honor of his devoted service to his alma mater. Awarded to a student majoring in the physical sciences, with preference given to young men and women majoring in chemistry.

THE HOWARD LANE RUBENDALL SENIOR SCHOLARSHIP. Established by Wheel and Chain and Omicron Delta Kappa in honor of Dr. Howard Lane Rubendall, president of the College, 1961-75. Endowed by students and friends. Awarded annually, at the discretion of the president, to a rising senior on the basis of superior academic achievement and demonstrated leadership in the College community.

THE RUBENDALL SCHOLARS PROGRAM. Established in 1975 in honor of Dr. Howard Lane Rubendall, president of the College, 1961-75. Endowed by friends and alumni in recognition of his commitment to students. Rubendall Scholarships are available to in-

coming freshmen and may be held by a student throughout his or her career at the College. Awarded on the basis of outstanding ability with first consideration to applicants who have the greatest financial need.

THE EDGAR H. RUE MEMORIAL SCHOLARSHIP FUND. Endowed by a friend in memory of Edgar H. Rue, Class of 1913.

THE MARY SACHS SCHOLARSHIP. Endowed by the trustees of the Estate of Miss Mary Sachs.

THE WILMER WESLEY SALMON SCHOLARSHIP. Endowed by Cora Belle Salmon in memory of her husband, a trustee of the College, 1913-31.

THE VALERIE SCHALL SCHOLARSHIP. Preference given to students preparing for the United Methodist ministry.

THE CHARLES T. SCHOEN SCHOLARSHIPS.

THE ARNOLD BISHOP AND MARY AGNES SHAW SCHOLARSHIP. Endowed by Miss Clara W. Shaw, Mrs. Bertha Shaw Nevling, Mrs. Jeanne Shaw Bailey, Calvin Bishop Shaw and Charles M. Shaw.

THE JAMES ROSS SNOWDEN SCHOLARSHIP. Endowed by Mary T. Snowden Stansfield in memory of her father. Preference given to a student pursuing a legal career.

THE MARY ANN OCKER SPITAL SCHOLARSHIP. Preference given to a student preparing for the ministry or a related career.

THE WILLIAM M. STAUFFER SCHOLARSHIP.

THE CAPTAIN JOHN ZUG STEESE SCHOLARSHIP. Endowed by Mrs. Anna Zug Schaeffer Steese. Given to an upperclassman who has excelled in mathematics and in service to the College.

THE MARTIN VAN BLARCOM SCHOLARSHIP. Preference to be given to a resident of Westchester County, New York.

THE MOSES VAN CAMPEN CHAPTER D.A.R. SCHOLARSHIP. Endowed by Miss Elizabeth A. Low. Preference given to students from Columbia County, Pa.

THE JULIA VAN DUSEN SCHOLARSHIP. Endowed by Henry Logan '10. Preference given to residents of the Greater New York City area.

THE ALBERT AND NAOMI WATSON SCHOLARSHIP. Preference given to a student from Carlisle.

THE M. WILLIAM WEDELL SCHOLARSHIP. Endowed by Meta Hofer in memory of her brother.

THE M. HELEN LEHMAN WHITMOYER MEMORIAL SCHOLARSHIP. Endowed by Raymond B. Whitmoyer '13 in memory of his wife.

THE ELLA STICKNEY WILLEY SCHOLARSHIP.

THE ANNIE WINDOLPH SCHOLARSHIP. Awarded to a student or students preparing for a career in dentistry.

THE ROBERT J. AND JOANNE HARDICK WISE SCHOLARSHIPS.

THE REVEREND WILLIAM WOOD SCHOLARSHIP. Endowed by Miss Sarah Wood.

THE HELEN KISNER WOODWARD SCHOLARSHIPS. Endowed by Helen Kisner Woodward '08.

THE HUGH B. WOODWARD SCHOLARSHIPS. Endowed by the Hugh B. Woodward '08 and Helen K. Woodward '08 Trust.

THE EMMELINE MATILDA VAN RENSSELAER YARD MEMORIAL SCHOLARSHIPS. Endowed by John L. Yard, in memory of his wife. Preference given to students preparing to enter the ministry.

THE CHARLES K. ZUG MEMORIAL SCHOLARSHIP. Endowed by Lemuel Towers Appold, Esq. '82 in memory of Charles K. Zug '80, a trustee of the College.

THE LLOYD A. AND MABEL K. BURKHOLDER FUND provides permanent endowment for the Lloyd A. and Mabel K. Burkholder Scholarship and the Lloyd A. and Mabel K. Burkholder Public Affairs Symposium at Dickinson College.

LOAN FUNDS

THE CORNELIA C. THUMM FUND.

THE AMERICAN BANKERS ASSOCIATION FOUNDATION FOR EDUCATION IN ECONOMICS LOAN SCHOLARSHIP.

THE EMILY MAY PHELPS ATWOOD LOAN FUND. Established by her parents, Mr. and Mrs. Andrew H. Phelps.

THE BOARD OF EDUCATION OF THE UNITED METHODIST CHURCH STUDENT LOAN FUND. For members of that Church.

THE CENTRAL PENNSYLVANIA CONFERENCE LOAN FUND.

THE EMERGENCY LOAN FUND. Administered by the Dean of Educational Services.

THE CLARA RIEGEL STINE FUND. Used to assist students studying for the ministry of The United Methodist Church.

THE MARIA ELIZABETH VALE STUDENT SELF-HELP FUND. Endowed by Ruby R. Vale, Esq. '98 in memory of his daughter.

THE MARY A. WILCOX MEMORIAL FUND. Endowed by A. Dorothea Wilcox.

Students of the College may be eligible for other scholarship and loan funds which are not administered by the College. Information concerning all loan opportunities may be obtained from the director of financial aid or from the treasurer of the College.

REFERENCE



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Dickinson College Calendar

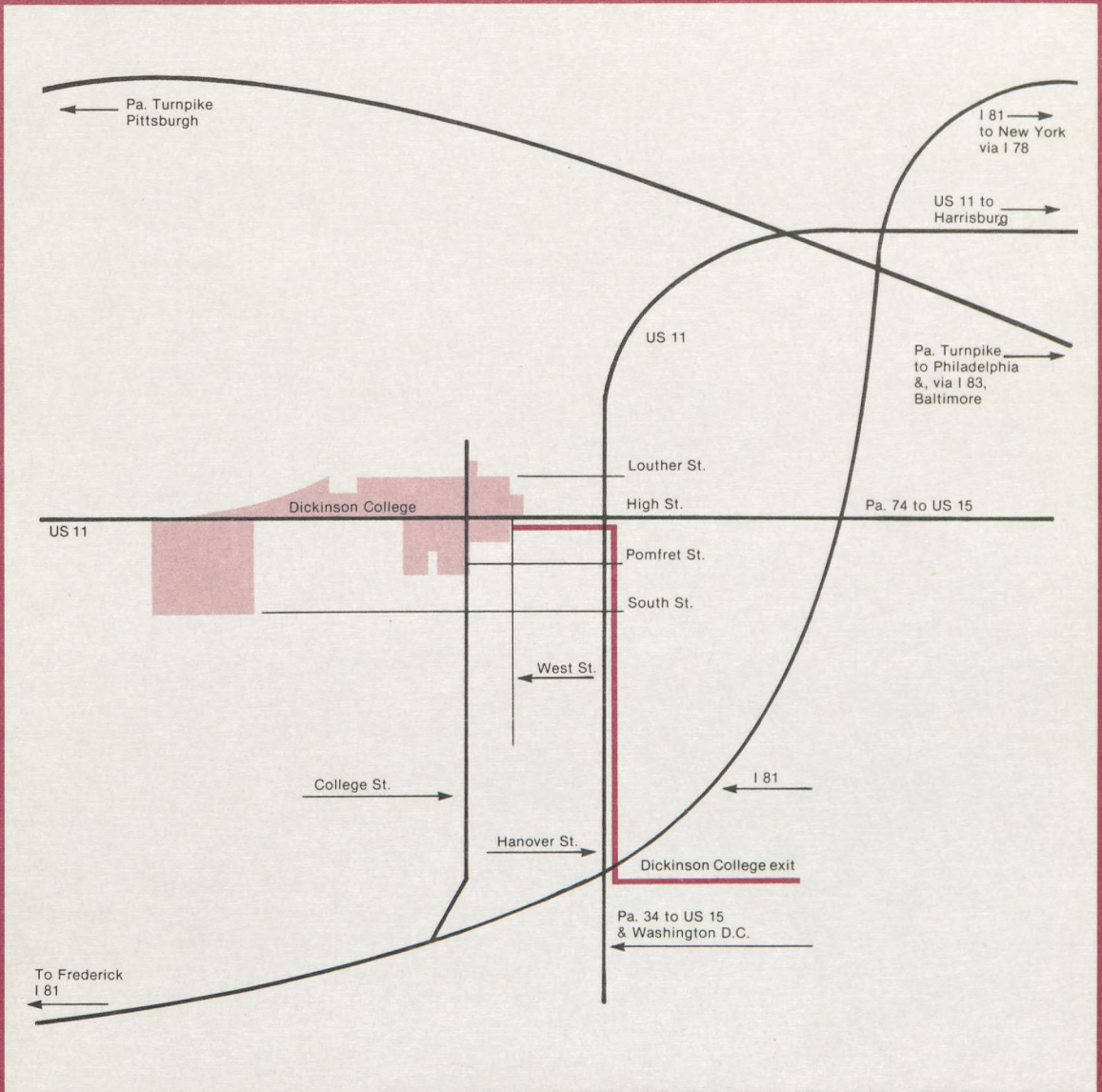
Fall 1979 Semester

New Student Orientation Begins — Saturday, September 1
Registration — Tuesday, September 4
Convocation — Tuesday, September 4
Classes Begin — Wednesday, September 5
Last Day to Add Courses — Tuesday, September 25
Last Day to Drop Courses — Tuesday, September 25
Last Day to Change From or To Pass/Fail — Tuesday, September 25
Last Day to Drop In Level — Thursday, October 4
Roll Call — Friday, October 19
Pre-registration for the Spring 1980 Semester — Week of November 12
Thanksgiving Vacation — 5 p.m., Friday, November 16 to 8 a.m., Monday, November 26
Classes End — Friday, December 14
Final Examinations — Monday, December 17 through Saturday, December 22
All Grades Due — by NOON, Thursday, January 3

Spring 1980 Semester

New Student Orientation — Monday, January 21
Registration — Tuesday, January 22
Classes Begin — Wednesday, January 23
Last Day to Add Courses — Tuesday, February 12
Last Day to Drop Courses — Tuesday, February 12
Last Day to Change From or To Pass/Fail — Tuesday, February 12
Last Day to Drop In Level — Thursday, February 21
Roll Call — Friday, March 7
Spring Vacation — 5 p.m., Friday, March 14 to 8 a.m., Monday, March 24
Pre-registration for the Fall 1980 Semester — Week of March 31
Classes End — Friday, May 2
Reading Period — Monday and Tuesday, May 5 & 6
Final Examinations — Wednesday through Saturday, May 7-10; and Monday, Tuesday, May 12 & 13
Senior Grades Due — by NOON, Wednesday, May 14
All Other Grades Due — by NOON, Tuesday, May 20
Baccalaureate — 10:30 a.m., Sunday, May 18
Commencement — 3:00 p.m., Sunday, May 18

How to Get to Dickinson College





DICKINSON COLLEGE

Carlisle, PA 17013

Founded 1773

Coed, liberal arts

Independent

1,610 enrollment

1979-1980